VOLUME XXXVII NUMBER ONE

THE NATIONAL GEOGRAPHIC MAGAZINE

JANUARY, 1920

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To carry out the purpose for which it was founded thirty-one years ago, the National Geographic Society publishes this Magazine. All receipts from the publication are invested in the Magazine itself or expended directly to promote geographic knowledge and the study of geography. Articles or photographs from members of the Society, or other friends, are desired. For material that the Magazine can use, generous remuneration is made. Contributions should be accompanied by an addressed return envelope and postage, and be addressed: Editor, National Geographic Magazine, 16th and M Streets, Washington, D. C.

Important contributions to geographic science are constantly being made through expeditions financed by funds set aside from the Society's income. For example, immediately after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. So important was the completion of this work considered that four expeditions have followed and the extraordinary scientific data resultant given to the world. In this vicinity an eighth wonder of the world was discovered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures, evidently formed by nature as a huge safety-valve for erupting Katmai. By proclamation of the President of the United States, this area has been created a National Monument. The Society organized and supported a large party, which made a three-year study of Alaskan glacial fields, the most remarkable in existence. At an expense of over $50,000 it has sent a notable series of expeditions into Peru to investigate the traces of the Inca race. The discoveries of these expeditions form a large share of the world's knowledge of a civilization which was waning when Pizarro first set foot in Peru. Trained geologists were sent to Mt. Pelee, La Soufriere, and Messina following the eruptions and earthquakes. The Society also had the honor of subscribing a substantial sum to the historic expedition of Admiral Peary, who discovered the North Pole April 6, 1909. Not long ago the Society granted $20,000 to the Federal Government when the congressional appropriation for the purchase was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people and incorporated into a National Park.

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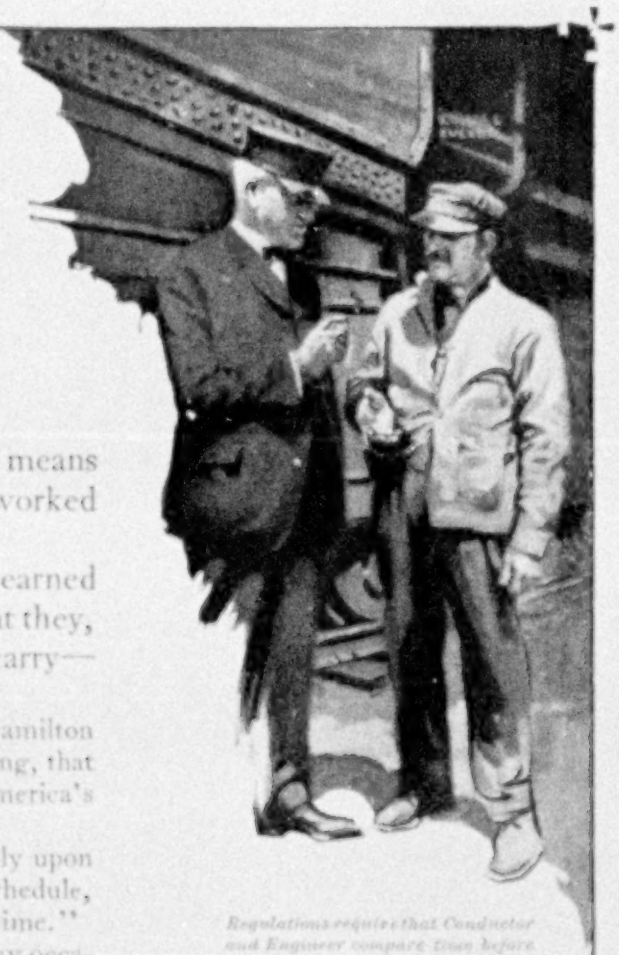

Regulations require that Conductor and Engineer compare time before the start of each run. That's what Conductor J. County and Engineer E. T. Reed, who together run the 2000 Erie train, are shown doing. They both carry Hamilton Watches. The accuracy of their Hamiltons has helped both men to a reputation for precise and punctual service.

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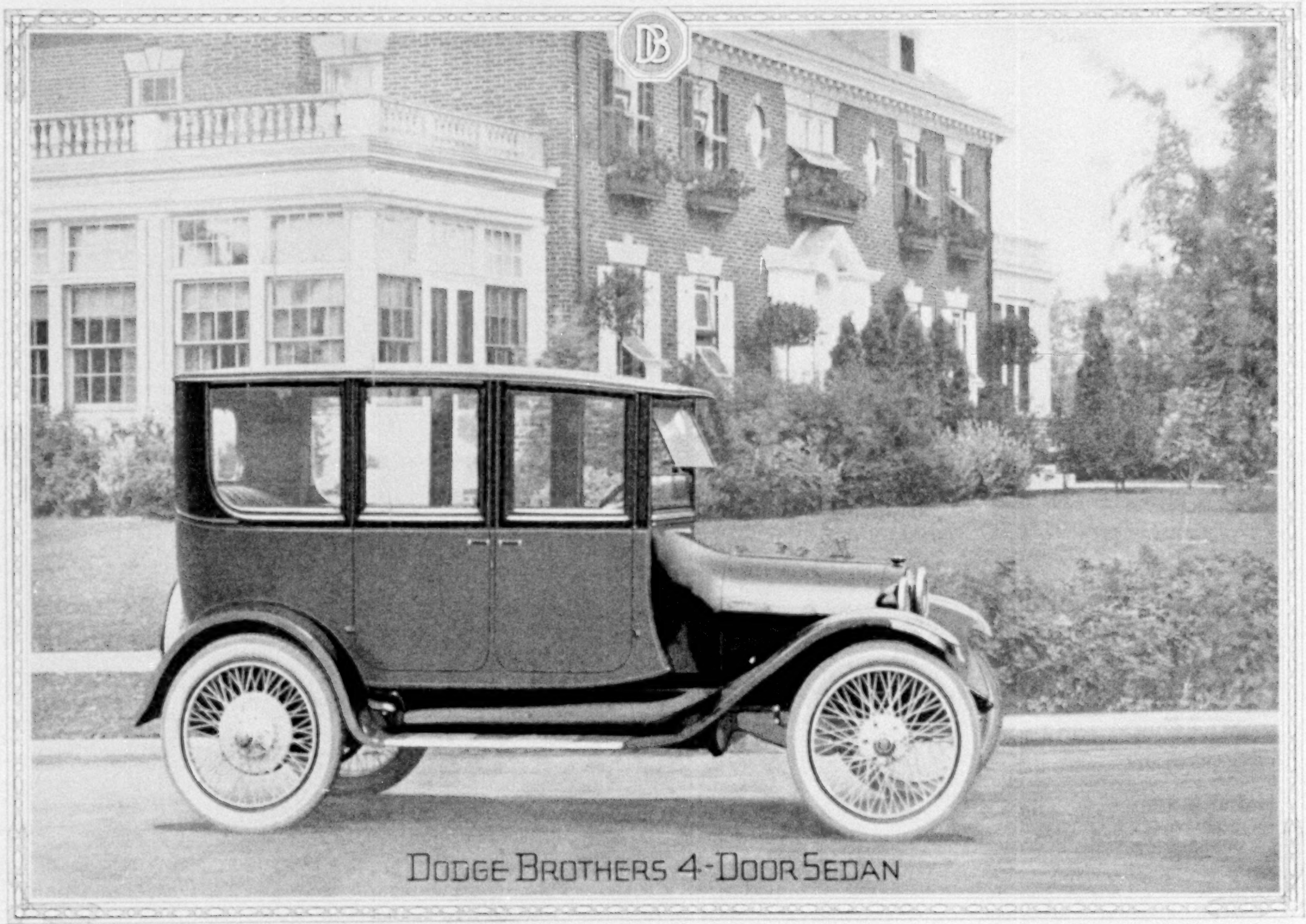


DODGE BROTHERS 4-DOOR SEDAN

Taxicabs use WEED TIRE CHAINS

Because they can't afford to take chances and because, with Weed Chains, they get greater mileage out of their tires.

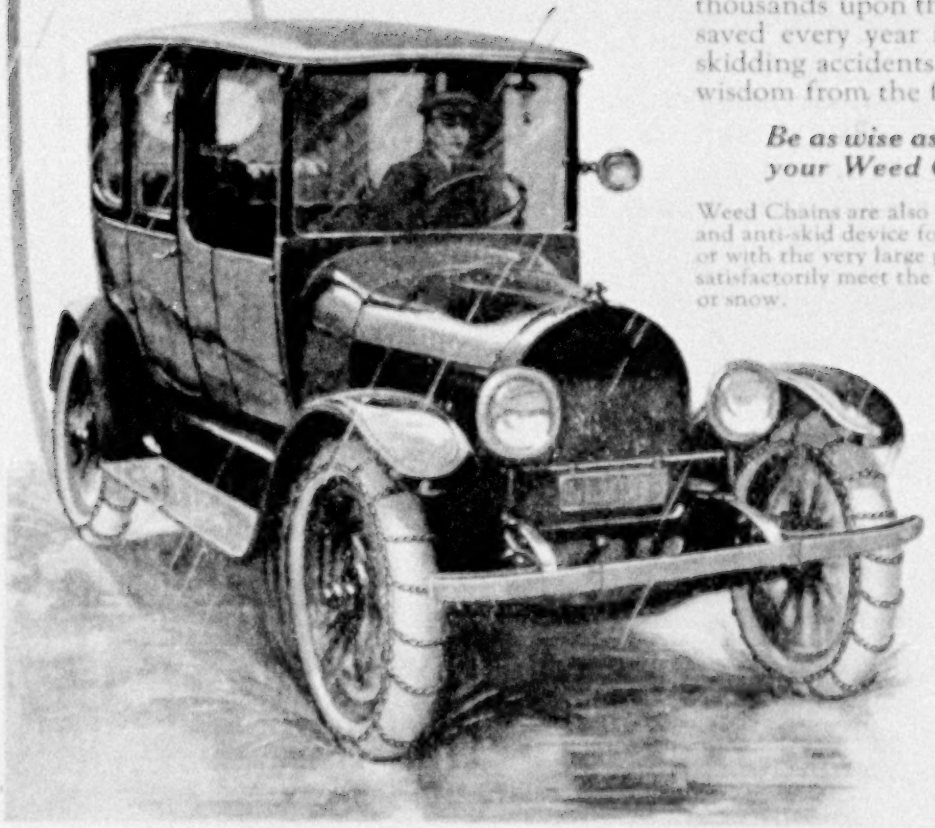
It's a business proposition, pure and simple, with taxicab companies. They use Weed Chains for economy and accident insurance.

The *main* incentive for the use of Weed Chains is the accident-preventing feature—a most important factor as it means the saving of lives and property.

But further than that it is known from bitter and costly experience than the continual, constant and yet hardly perceptible slipping of the rubber tire-surface on wet roads and pavements—only the foot or so of lost traction at a time—is an alarming expense item—wearing out tires just the same as if you pressed them against a rapidly revolving grindstone.

Taxicab companies have learned from experience that *only by the use of Weed Chains* can this continuous wear on tires be prevented. Their drivers are *ordered* to put on their Weed Chains "at the first drop of rain" because of the thousands upon thousands of dollars that are thus actually saved every year in tire service and the elimination of skidding accidents. Wouldn't it be well for you to learn wisdom from the fellow who really knows?

Be as wise as the taxi driver and always put on your Weed Chains "at the first drop of rain."



Weed Chains are also made to meet the demand for an efficient traction and anti-skid device for trucks equipped with single and dual solid tires or with the very large pneumatic tires. They are so constructed that they satisfactorily meet the requirements of heavy truck service in mud, sand or snow.

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The most interesting period in the history of European travel will be the year 1920. The pent-up desire for Europe, suppressed for five years, may now be gratified, and, more than that, the Great Battlefields, the untouched, untarnished monuments to the valor of American and Allied heroes, are still essentially unchanged, still saturated with tragedy, still littered with the relics of Titanic struggling.

Raymond-Whitcomb Service

Never in the history of Raymond-Whitcomb Tours has that premier organization been better equipped to render perfected travel-service to Americans of discriminating tastes. This year the so-called "independent" travelers, even those experienced with past-and-gone conditions, will experience great difficulties. But the traveler with a Raymond-Whitcomb Tour will be free from them.

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The Raymond & Whitcomb Company is prepared and its plans have been tested. It has been prepared by visits of high officers of the Company themselves to Europe, visits beginning immediately after the Armistice and repeated steadily since then. It has been tested by the success of the first party, the most parties, the most successful parties, and the largest number of people taken to and through Europe since travel was opened.

Never in the history of European travelers has there been greater opportunity for personal independence, independence of untoward conditions, of trouble, of uncertainty, of unpleasant companionship, than will be experienced in the year 1920, *Provided:*

That they (perhaps you) obtain membership in one of the Raymond-Whitcomb Tours to the Great Battlefields. A definitely limited number of people will be taken, so it is essential that plans be made early for Spring and Summer and one of our offices advised early of your intention, in time to book you for the right party.

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MARMON 34

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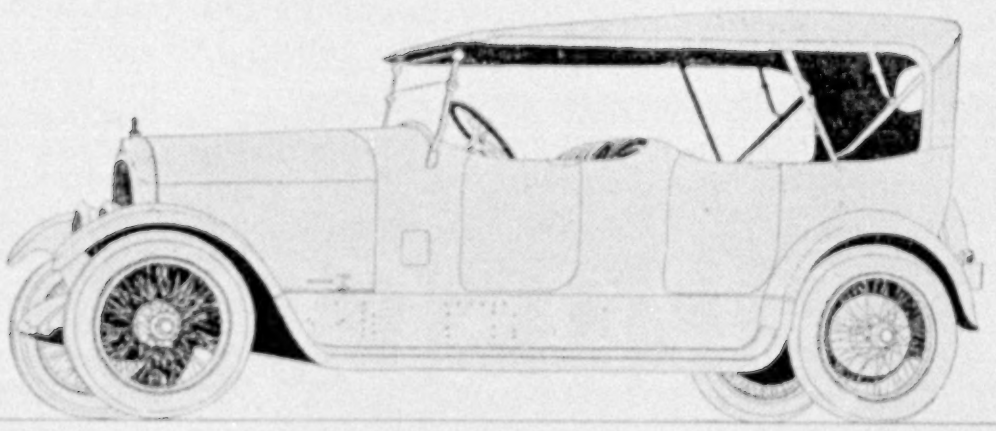

CHAMPION LIBERTY MOTOR BUILDERS

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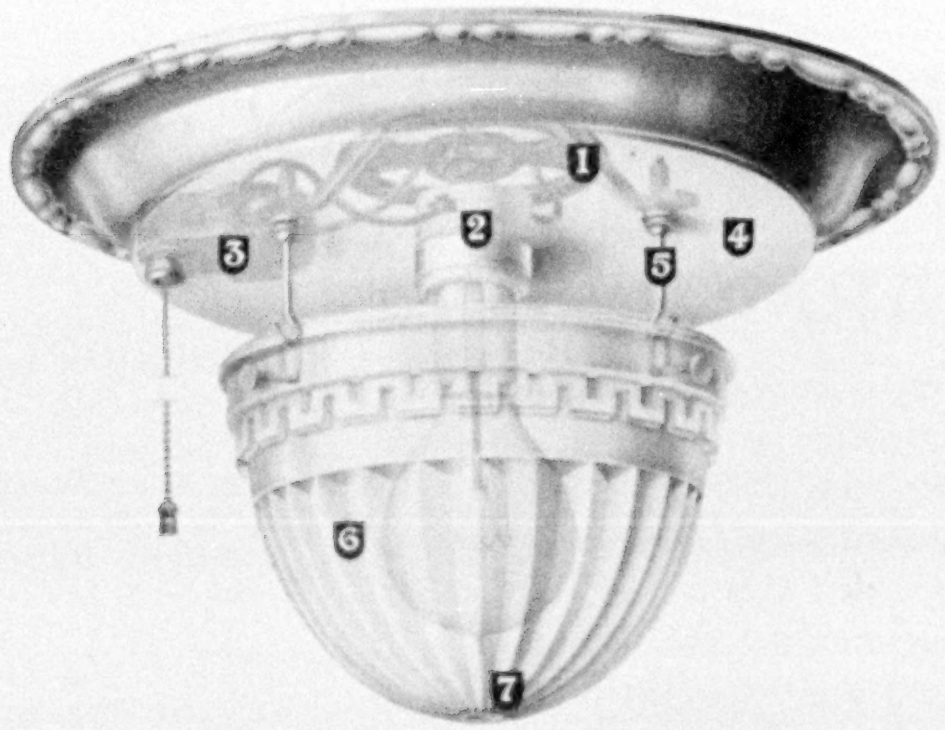

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3—Brascolite Pull Switch of new toggle construction in insulating material. 660-watt capacity.

4—Brascolite Flat Reflector Plane made of white porcelain on steel—positively will not discolor.

5—Brascolite Spindles hold reflector-base flush with the ceiling and also support the bowl. Adjustable to correctly position the bowl for controlling every ray of light, thus insuring uniform light distribution.

6—Scientific configuration of the white glass bowl thoroughly breaks up the intense white light and softens it by diffusion. This principle has made Brascolite the ideal light for eye-health and comfort exceeding in efficiency that of any other light diffusion fixture in the world.

7—Ventilation upward through the hole assures long lamp life and least accumulation of dust.

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No matter how large or how small your requirements, Brascolite will meet your needs perfectly—there's a Brascolite for every purpose.

15,000 Electrical Dealers sell Brascolite. Our Engineering Department is at your service and will gladly make calculations or give helpful advice concerning any requirements.

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Champion the Essex

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It made the issue on finest car qualities without useless weight or size.

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Then answer if Essex has not proved great size and weight needless to fine car quality.

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Of the legion who know and praise Essex performance, none express more satisfaction than former owners of large, costly cars.

Skeptics at first, they now appreciate the way Essex combines light car advantages, with the qualities of comfort and flexible performance, they knew and formerly considered exclusive in their big cars.

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Pyorrhea, which afflicts so many over forty, has passed her by. In its blighting touch, Pyorrhea is akin to age. Its infecting germs deplete vitality. They cause the gums to recede, the lips to lose their contour, the teeth to loosen and decay.

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If you have tender or bleeding gums (the first sympton of Pyorrhea) use Forhan's For the Gums.

Forhan's For the Gums will prevent Pyorrhea—or check its progress—if used in time and used consistently. Ordinary dentifrices cannot do this. Forhan's keeps the gums firm and healthy—the teeth white and clean.

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Use it twice daily, year in and year out. Wet your brush in cold water, place a half-inch of the refreshing, healing paste on it, then brush your teeth *up and down*. Use a rolling motion to clean the crevices. Brush the grinding and back surfaces of the teeth. Massage your gums with your Forhan-coated brush—gently at first until the gums harden, then more vigorously. If the gums are very tender, massage with the finger instead of the brush. If gum-shrinkage has already set in, use Forhan's according to directions and consult a dentist immediately for special treatment.

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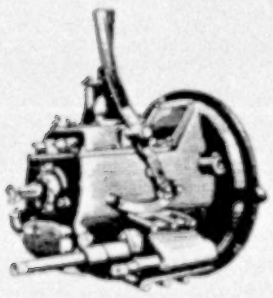

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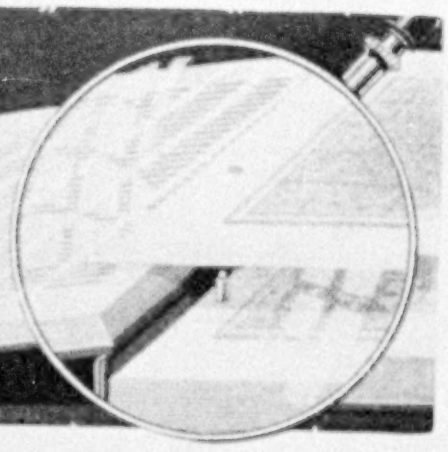

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Where the Shantung Peninsula is?

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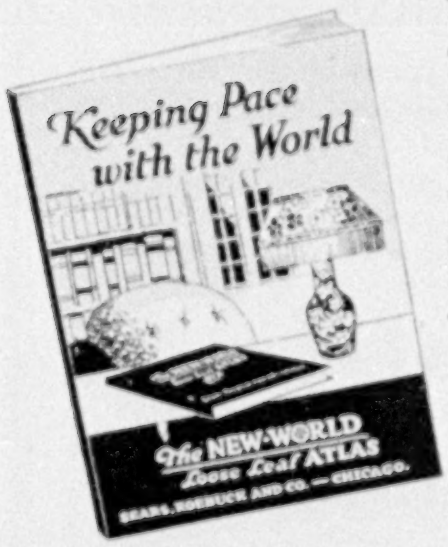

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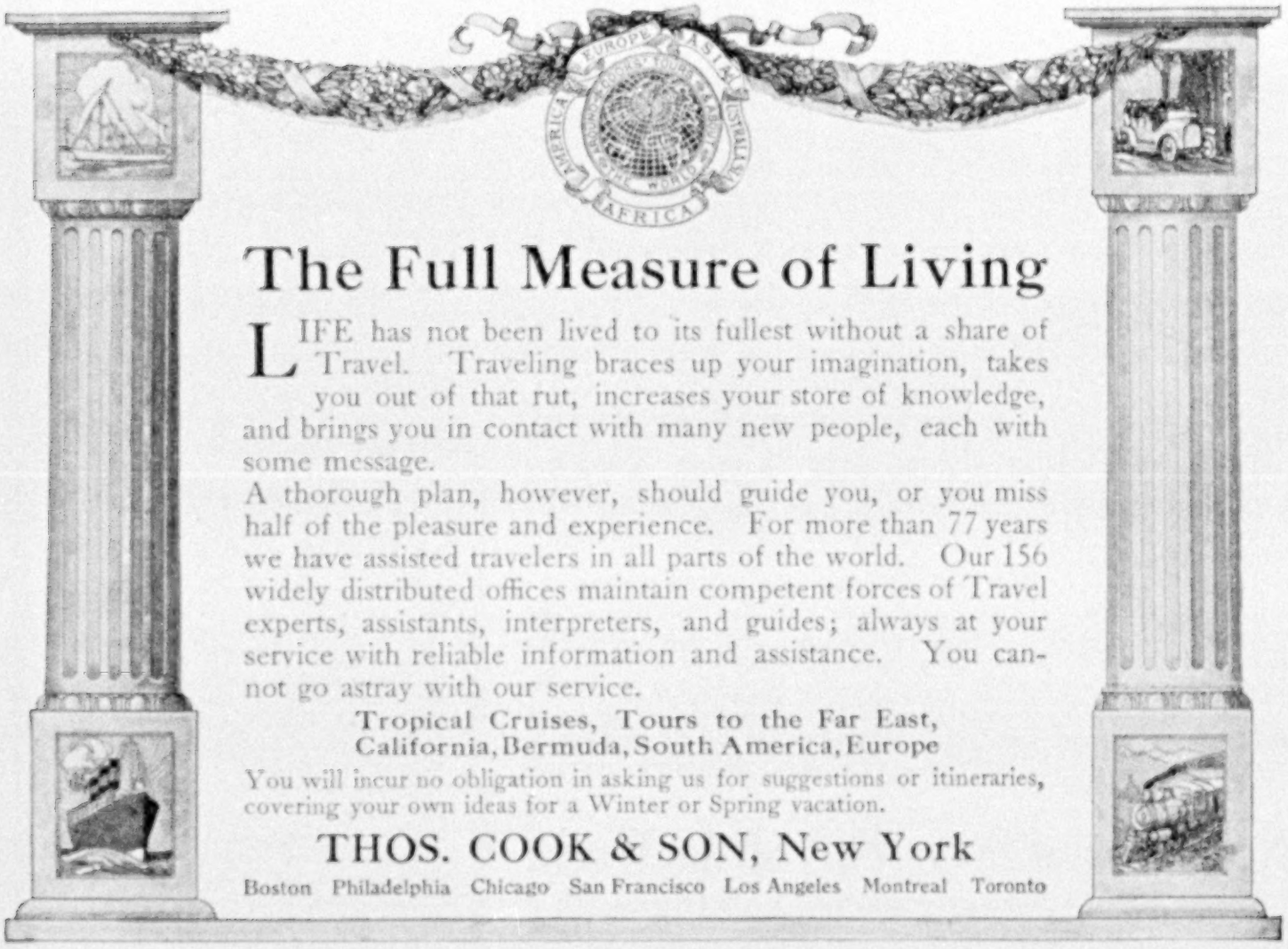

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THE LAST ISRAELITISH BLOOD SACRIFICE

How the Vanishing Samaritans Celebrate the Passover on Sacred Mount Gerizim

BY JOHN D. WHITING

AUTHOR OF "FROM JERUSALEM TO ALEPPO," "VILLAGE LIFE IN THE HOLY LAND," AND "JERUSALEM'S LOCUST PLAGUE," IN THE NATIONAL GEOGRAPHIC MAGAZINE

Illustrated with the only set of night photographs ever taken of this ancient ceremony, and numerous other unique pictures, by the American Colony Photographers, Jerusalem, Palestine

SHECHEM, Samaria, and Neapolis were once great cities of the ancient civilized world. Today their glory and importance are no more, save in history. Here alone we find a dying and almost extinct community of Samaritans, the remnant of a once numerous sect, whose persistent continuation and literal performance of the Passover Sacrifice have attracted the attention of students for more than three centuries.

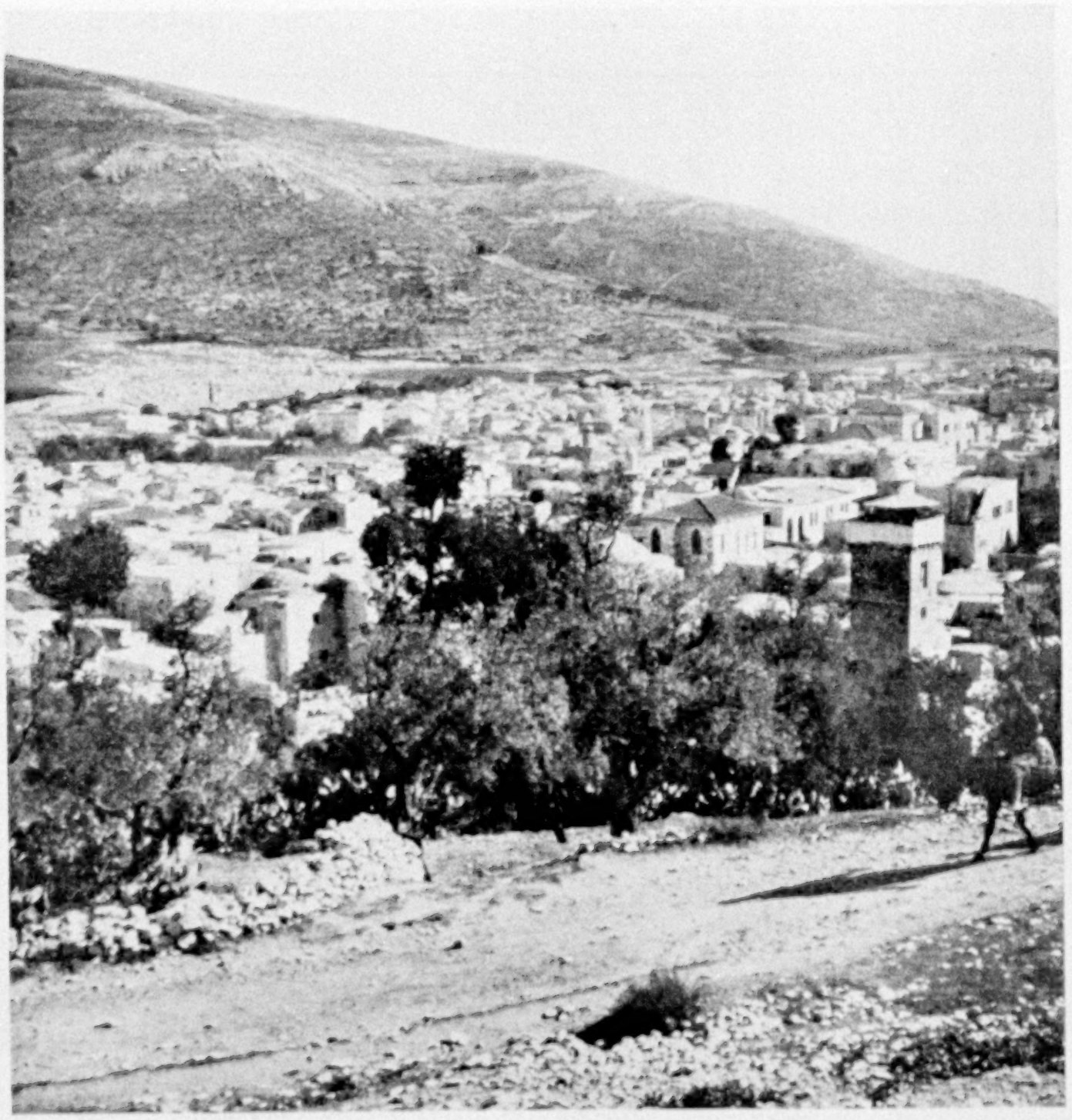
Nablus, the modern Shechem, the only home of the Samaritans of today, is a town of about 27,000 inhabitants, lying some forty miles north of Jerusalem. The population is chiefly Moslem, the remainder being composed of various Christian sects, together with a mere handful of Samaritans. But as yet no Jew has settled there, the Biblical axiom still holding good, "for the Jews have no dealings with the Samaritans."

Besides being a center of trade, Nablus has gained a little fame for its soap, made of pure olive oil, a variety which, though crudely manufactured, is used almost exclusively by the people of the city, and is much prized by the natives of Syria and Egypt.

The town nests in a confined valley running east and west, between twin mountains—Ebal, some 3,000 feet above sea-level, which looms up on the north, and the lesser Gerizim, about 150 feet lower, which closes in on the south, with its base in places only a few hundred yards from that of its mate.

From the lower slopes of Gerizim issue numerous and copious springs. The modern town has therefore crept up in their direction. These waters, after filling the demand made upon them by the city, find their way into extensive gardens to the west, where flourish fig trees, laden with delicious fruit, pomegranates hung with scarlet bloom and fruit, yellow quinces, walnuts, mulberries, olives, and occasional bitter-orange trees raised for the perfume extracted from the flowers. Among the trees many varieties of vegetables grow in abundance.

The houses of the town are dome-roofed and lattice-windowed, constructed from the soft, white limestone of Mount



NABLUS (THE MODERN SHECHEM), THE ONLY HOME OF THE SAMARITANS TODAY

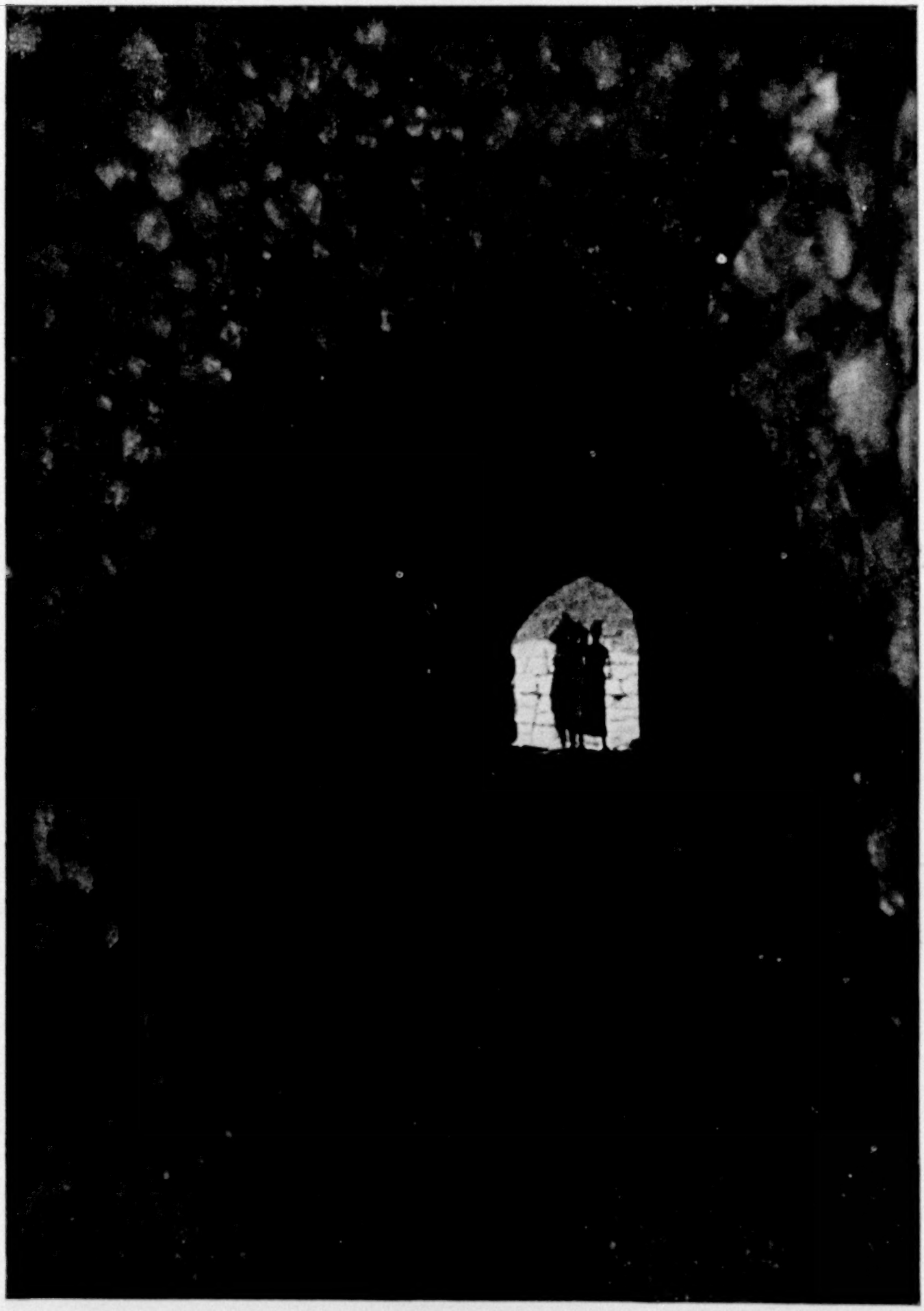
The town nestles in the valley which lies between Mount Ebal and Mount Gerizim. The picture is taken from the lower slopes of Gerizim, near Ras el Ain, while Mount Ebal is seen in the background (see map, page 46).

Ebal. The streets are picturesquely narrow and most of them are paved with cobble-stones, with here and there an arch thrown across and supporting a room above.

THE HOME CITY OF THE SAMARITANS

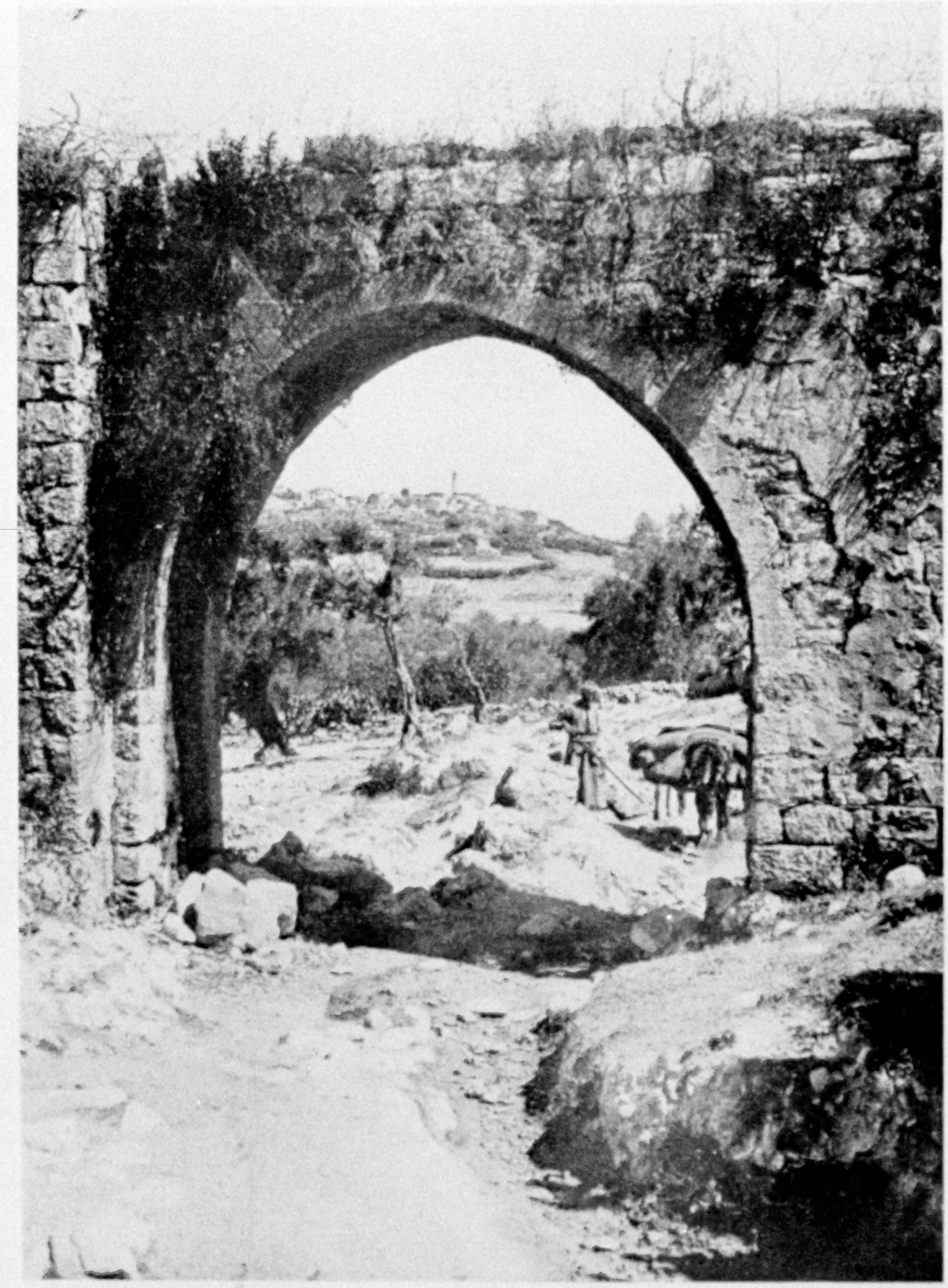
In the "souks," or markets, as in most Syrian towns, the stores are so small that the customer stands outside to examine the meager display of European and native (Damascene) wares. Here are rows of silversmith shops, where the artisans work cross-legged, producing from crude silver elaborate ornaments for the peasant women. Here are the coffee shops, the street in front blockaded with men sitting upon low stools, sipping the thick, hot beverage from tiny cups and smoking the long, red-piped, bubbling narghile as they gossip and play a game of "tawla."

Next are the sweetmeat venders, from whose stalls large trays of "kanafie" protrude into the street. This pastry dish, for which Nablus is noted, has a filling of fresh, sweet cheese. After it is baked,



A STREET IN THE SAMARITAN GHETTO OF NABLUS

From the main market-place, long, dark, tunnel-like lanes lead to the Samaritan Quarter, at the foot of the sacred Mount Gerizim.



THE HILL OF SAMARIA

Omri, the sixth king of Israel, in the ninth century B. C., bought an isolated hill a few miles west of Shechem, where he built his capital and named it Samaria, after its original owner.

THE ACROPOLIS OF SAMARIA

The city of Samaria from its inception overshadowed its rival, Shechem, and perhaps under Roman rule attained the pinnacle of its glory. The Emperor Augustus presented it to Herod the Great, who rebuilt and embellished it after the Roman style and renamed it Sebaste.

melted butter and thick syrup are poured over it until it is literally soaked with the mixture.

From the chief market-place the Samaritan Quarter of Nablus is approached from the north through long, tunnel-like lanes which lead to the very foot of the sacred mountain.

Just above the city, Gerizim is steep and rocky, and the trees disappear. In summer the mountain side is gray and barren, but in winter even the smallest patches of earth are scratched with primitive plows and sown with wheat or barley.

THE FRIENDLY CACTUS

Across from the town the slopes of Ebal present a very different picture. Equally rocky, they are still perennially green with cactus bushes planted among the rock ledges, which are curiously studded with ancient sepulchers, whose open doors from a distance reveal only the

REBURYING AHAB'S PALACE: SAMARIA

The enormous quantity of earth removed by the American excavators in clearing these ruins was conveyed in baskets on the heads of women, who, like ants, formed an endless chain of toil, running back and forth. Once the archeological researches had been made, the ruins were again filled with the dust of remote ages, thus preserving them for future generations as well as returning the land to its owners in its original state.

RUINS OF THE ROMAN FORUM AT SAMARIA

Note the weather-beaten tops of the columns, while the lower parts retain their original whiteness, showing how deep these ruins were covered by debris when the work of excavation was undertaken, with the aid of American research funds, under the auspices of the Museum of Fine Arts, Boston.

darkness within. Some of these tombs were rifled centuries ago; others have come to light within the past few years. Many have stone doors and stone hinges, with stone locks still in working condition if the keys, probably of bronze, could be found.

But the modern inhabitants do not pride themselves on this interesting cemetery, as did the peoples of bygone times. To the Arabs of today antique relics are of no import; but they feel justly proud of the cactus or prickly-pear bushes, which present a weird spectacle and cover every available space in this oriental God's Acre. The fame of these bushes reaches as far as the Bosporus, where the much-prized fruit is a favorite gift among the notables of Constantinople.

The prickly-pear cactus was first introduced into Palestine by the Crusaders; today it is grown throughout the length and breadth of the land, being valuable not only for its fruit, but also as an ex-

SAMARITAN GIRLS LEARNING THEIR ANCIENT HEBREW

Note the latticed windows, used so extensively in the East to prevent men in the neighborhood from looking into the women's apartments.

A VIEW OF MODERN SEBASTE AND THE SURROUNDING HILLS

After climbing to the zenith of might, Sebaste slowly relapsed into insignificance. Today, amid the ruins of a splendid past, a squalid mud village occupies the site and retains the name.

cellent hedge. The natives, however, do not yet appreciate its great value as forage for cattle. The camels help themselves to it whenever they get a chance, their mouths being so tough that, regardless of the spines, they devour the leaves with unmistakable relish. The Ebal cactus' superiority lies in the extra large size of its fruit, the tenderness of its seeds, and its sweet and luscious flavor, due both to the peculiar soil and to the protection afforded from the cold north winds. The Arabic name for the pear, *sabbir* (patience), seems eminently appropriate to one who has innocently handled the unpealed fruit and had his hands filled with the microscopic spines, which can be extracted only by painful laboriousness.

SHECHEM, WHERE THE BIBLE INTRODUCES ABRAHAM

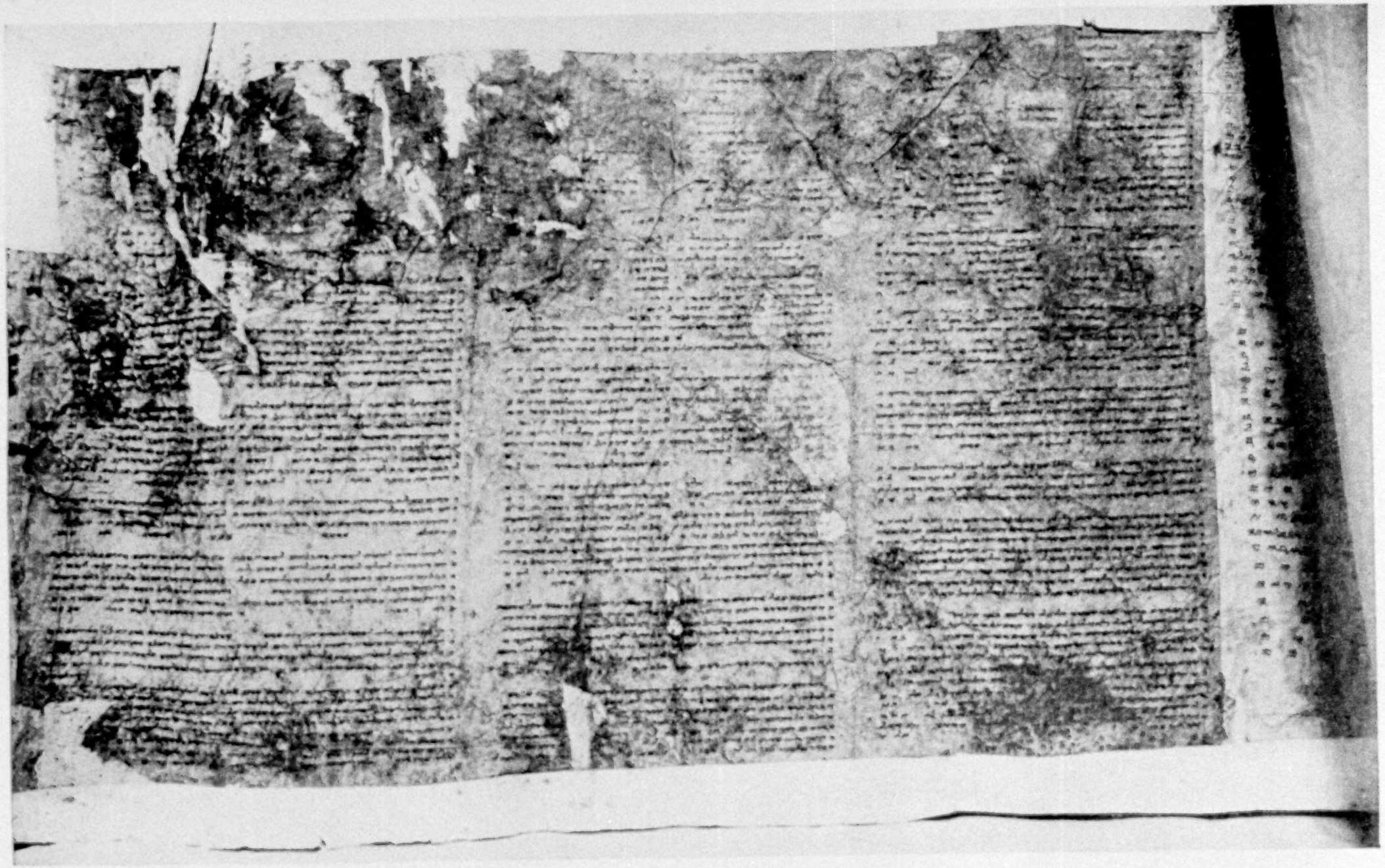
The first city built in this valley was Shechem, which occupied a site a short distance to the east of Nablus. Here, at the highest point of the valley, where the rains to the east find their way to the Dead Sea and those to the west to the Mediterranean, is a small artificial hill. Recent excavations by archeologists have revealed a city wall encircling the re-

THE SAMARITAN SYNAGOGUE

This, the only house of worship which the Samaritans possess, is a very plain building and only a few hundred years old. In the recess to the left, behind ornamented curtains, are primitive safes and cupboards containing many parchments and Pentateuchs, among them the noted Abishua Codex (see illustration, page 12).

ONE OF THE SYNAGOGUE CURTAINS.

This silken curtain, heavily embroidered in gold, is used in the synagogue to hang in front of the scroll chests. The designs represent the cup of manna, ark of the covenant, Aaron's rod blossoming, the seven-branched candlestick, the table of shew-bread, the golden censer, and other temple furnishings such as existed in the temple at Jerusalem.



THE FIRST PHOTOGRAPH EVER TAKEN OF THE ABISHUA CODEX, PROBABLY THE OLDEST COPY OF THE FIRST FIVE BOOKS OF THE BIBLE IN EXISTENCE

The date inscription on the scroll presents to the Samaritan mind indisputable proof that it was written by the great-grandson of Aaron in the early years of the entrance of Israel into Canaan. This Scroll of Abishua, as it is known, has now for the first time been photographed from end to end and will be published in exact life size. It is hoped that when these photographic copies are available to Hebrew students new light may be thrown upon many Scriptural controversies.

mains of houses and have laid bare numerous ancient earthenware vessels.

As we look upon these primitive habitations, more than 3,000 years old, it is hard to realize that we are not actually looking on the oldest city built here, but upon a town that, at this early date, had already had a long existence.

It is at Shechem, then called "Sichem," and the plain of Moreh, into which the Shechem gorge opens at its eastern extremity, that Biblical history introduces Abraham, the father of the Hebrews, in Canaan. Likewise Jacob made this locality his first halt on returning from his sojourn with Laban in Haran. Here he purchased the parcel of ground whither, at a later date, Joseph's bones were brought from Egypt to be buried, and where today Jacob's well is pointed out as the spot at which Jesus and the Samaritan woman met (see map, page 46).

Immediately following the Israelitish invasion of Canaan and the taking of Jericho and Ai, Joshua built upon Ebal the first altar of sacrifice erected by his people in the new land.

The Shechem Valley now became the theater of the first general convocation, and, according to the Mosaic injunction, the whole congregation was assembled, "half of them over against Mount Gerizim and half of them over against Mount Ebal." From Ebal were to be proclaimed the curses against those who should forsake the law of their God, and from Gerizim the blessings that would result in the following of *Yahweh* (the unpronounced Hebrew name for God).

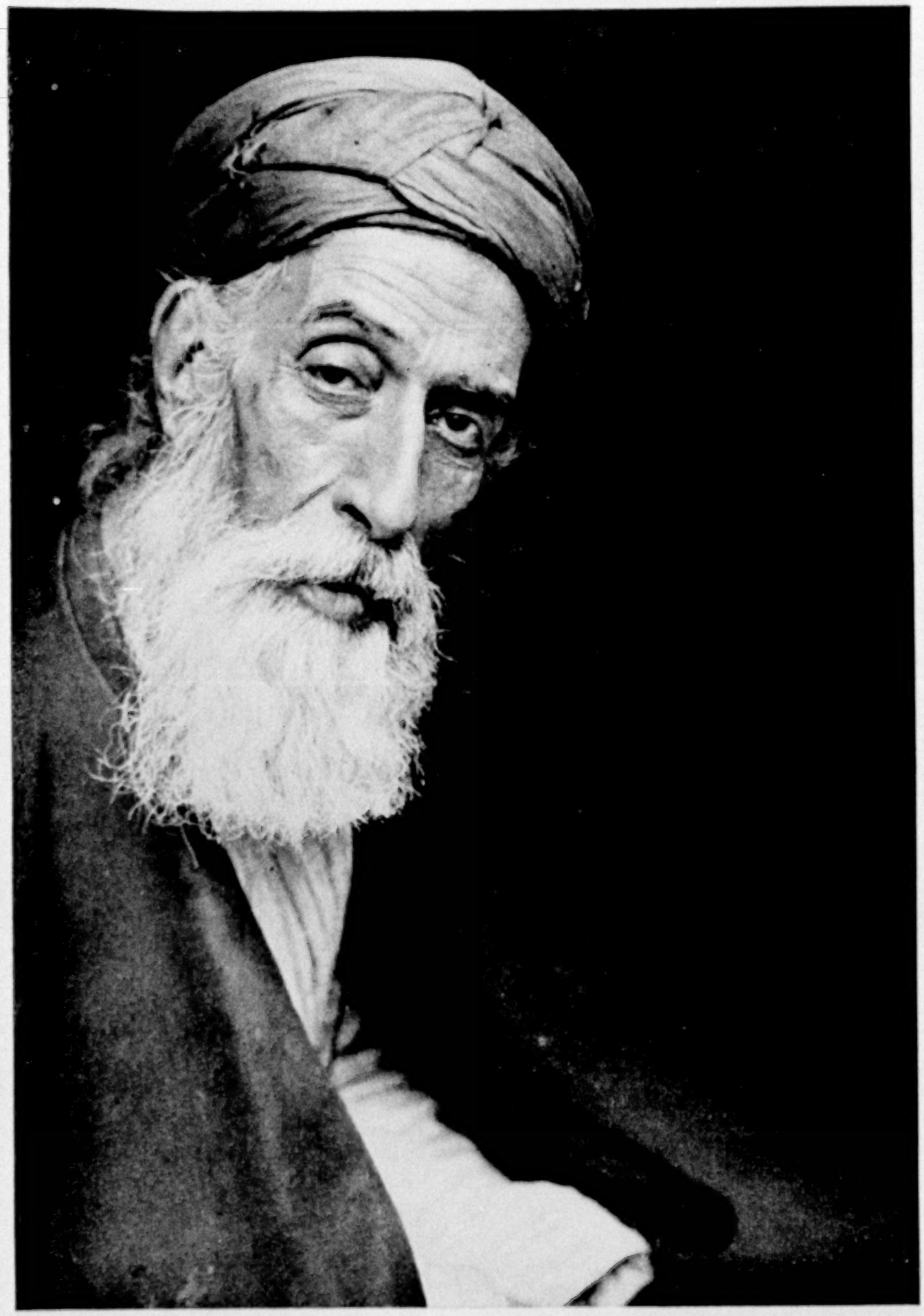
Here also, just before his death, Joshua addressed the last assembly of the people, making a covenant with them.

We now come to the broader period of its history. Ephraim, destined to figure as the leading tribe of the Northern Kingdom, had the lot of its possession fall to the district wherein Shechem lay. This territory was then known as "Mount Ephraim."

The town of Shechem itself was apportioned to the Levites, since they, being a tribe of priests, received no inheritance except cities and their suburbs in which to dwell throughout all the tribes. Shechem was also selected as one of the cities of refuge, and throughout the Hebraic occupation held an important place.

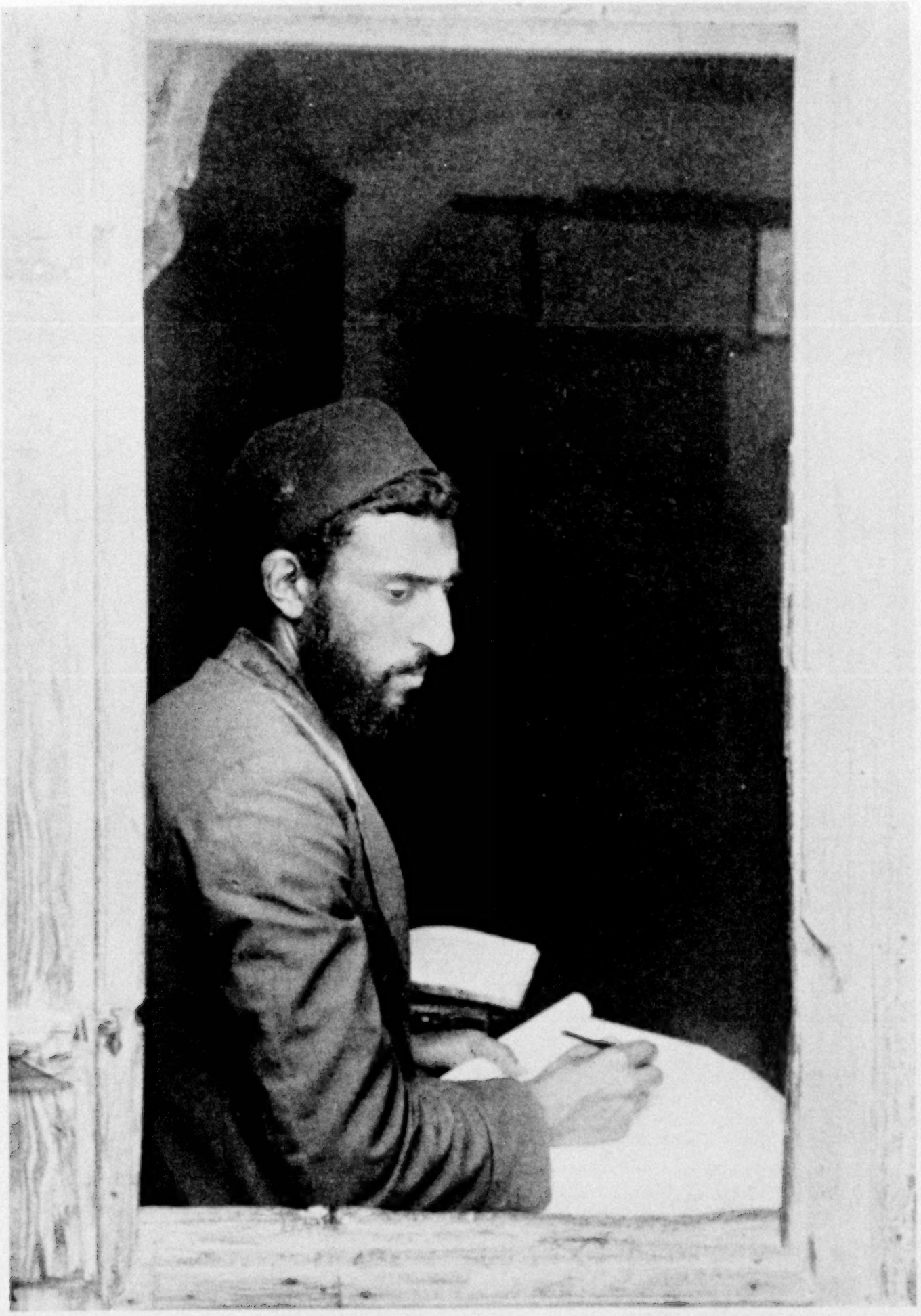
ABU EL HASSAN, SON OF THE LATE HIGH PRIEST JACOB

All the Samaritan priests wear long hair, which they wind under their dome-shaped fezzes. "And the Lord said unto Moses, speak unto the priests and say unto them that they shall not make baldness upon their heads; nor shall they shave off the corner of their beards" (Lev. 21 : 1-5).



JACOB, SON OF AARON, LATE SAMARITAN HIGH PRIEST

Members of the present priestly family trace their ancestry to the tribe of Levi. The direct Aaronic line that existed till modern times has now failed.



A YOUNG PRIEST WRITING A SAMARITAN PENTATEUCH

All the Samaritan Pentateuchs and prayer books, as well as the books used by the school children, are hand-written. Parchment was used up to two centuries ago; since then paper has come into vogue. Aside from the fact that the poverty of the modern Samaritan commends the use of paper, which is much cheaper, the orthodox scholar will not write on leather unless the hide from which it is prepared has been taken from an animal slaughtered by a priest.

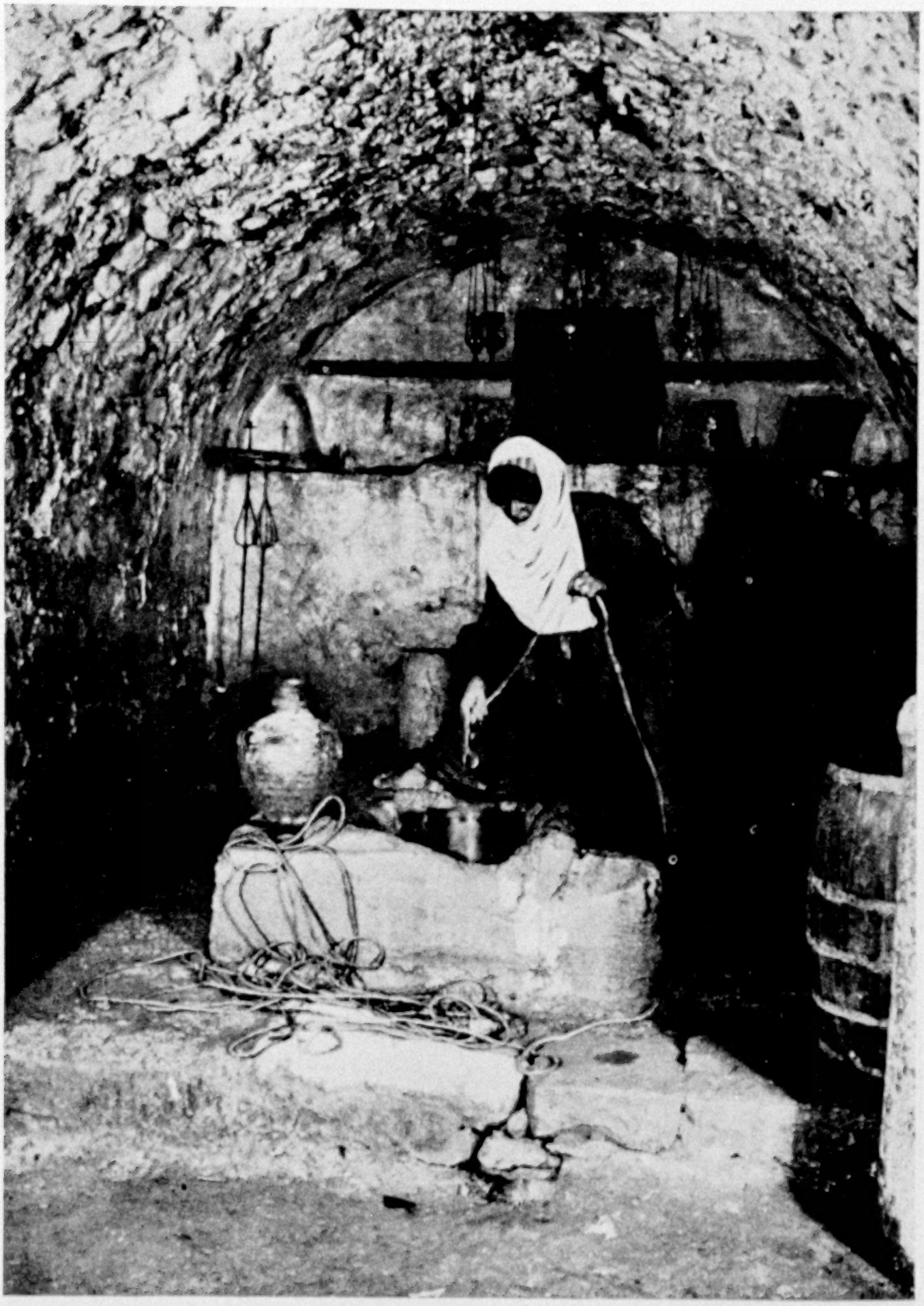
THE VILLAGE OF ASKAR, ANCIENT SYCHAR

Just behind the village is Jacob's well. The mountain in the background is Gerizim, while the mosque on its summit marks the site of the Samaritan temple to which, no doubt, the Samaritan woman pointed when conversing with Jesus.

During the period of the Judges little of importance is heard of Mount Ephraim, except that Abimelech, son of Gideon by a Shechemite concubine, was made "King" of Shechem, and ruled three years.

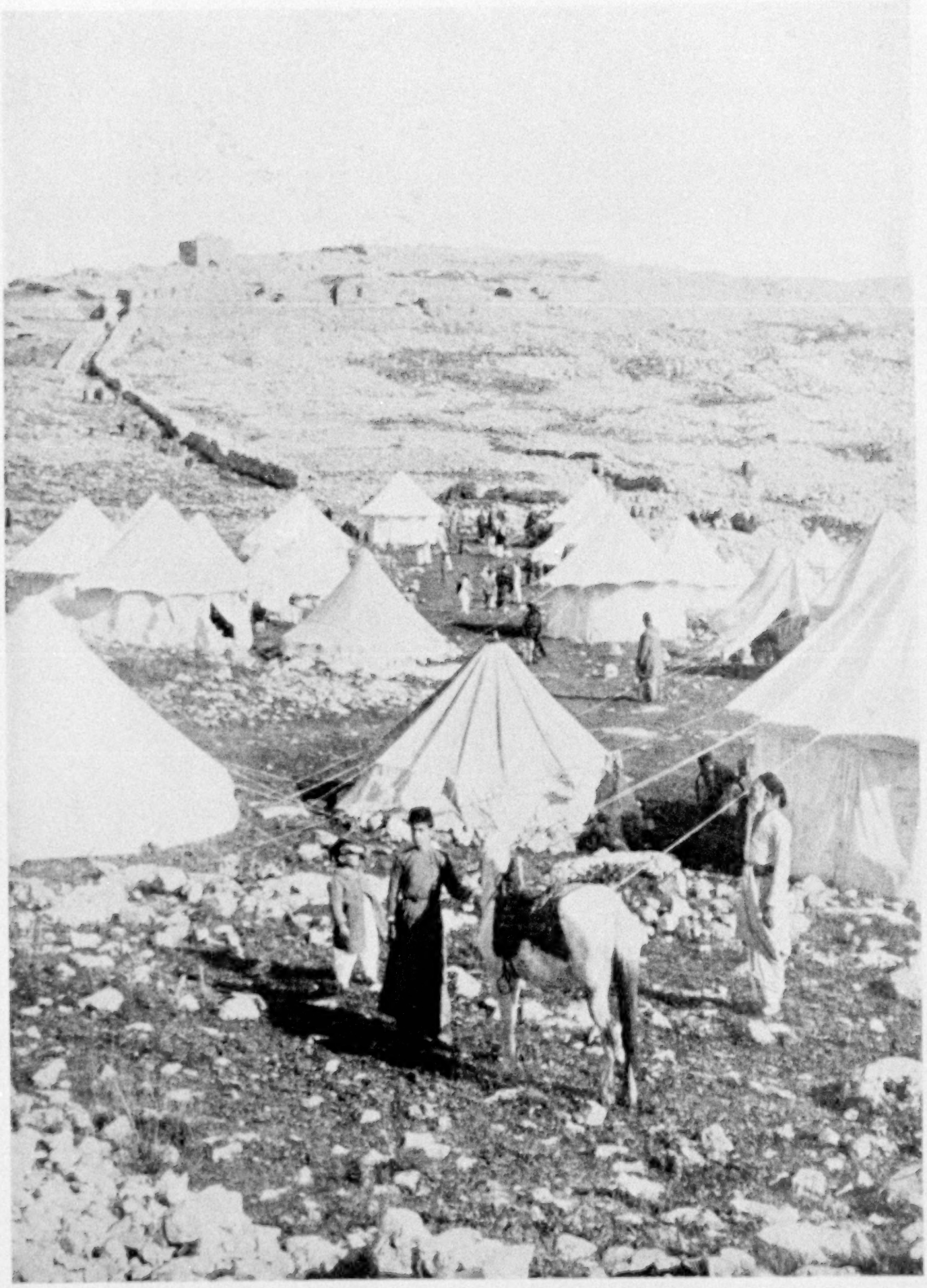
With the advent of David came the Golden Age of the Hebrews. The capital was moved to Jerusalem, where, upon his succession, Solomon built the renowned Temple and established thereby a center of worship.

But this unified kingdom was short-lived, and with the death of Solomon, his son, Rehoboam, proceeded to Shechem, where all Israel was gathered to make him king. Instead of this being consummated, ten tribes revolted and made Jeroboam, an attaché of Solomon's court, king. Jeroboam selected Shechem as his home. Thus the northern ten tribes established the Kingdom of Israel, now forever rent from the Kingdom of Judah, which was composed of the two remaining tribes, Judah and Benjamin.



NEAR SYCHAR IS JACOB'S WELL; ITS DEPTH IS INDICATED BY THE LENGTH OF THE ROPE

To the east, towering above the encampment, is the loftiest of Gerizim's peaks, crowned with ruins—a spot where once temples stood.



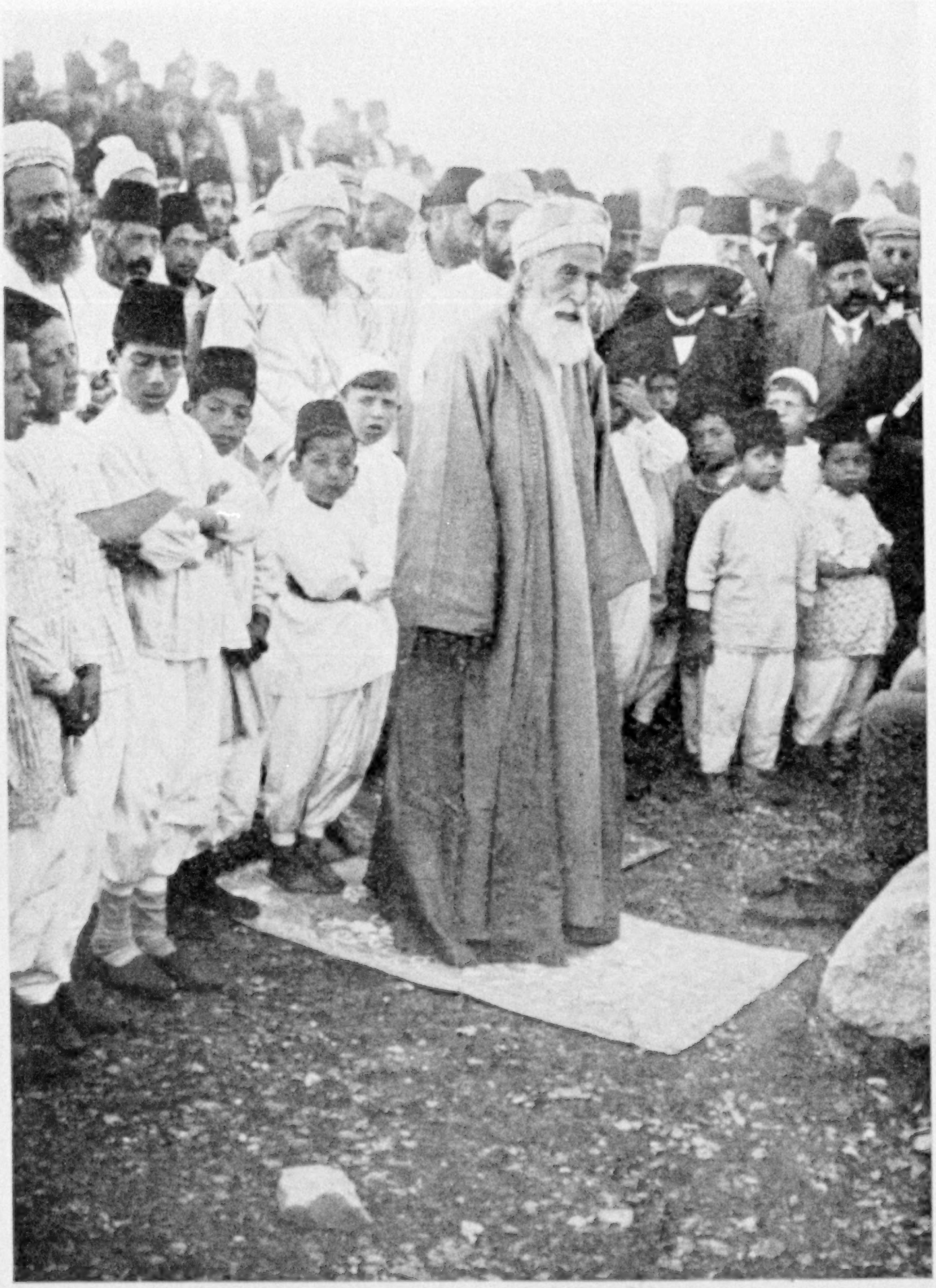
THE SAMARITAN PASSOVER CAMP, THE ONLY REMAINING ISRAELITISH CAMP IN THE WORLD

To the east, towering above the encampment, is the loftiest of Gerizim's peaks, crowned with ruins—a spot where once temples stood.

LAMBS SELECTED FOR THE SACRIFICE OF THE PASSOVER

THE CONGREGATION GATHERING FOR THE SACRIFICIAL CEREMONY

As they assemble one by one they spread small prayer cloths upon the ground. Upon these they stand with bare feet, having dropped their prayer slippers behind them.



THE SAMARITAN HIGH PRIEST JACOB LEADING THE PASSOVER SERVICE

Note the prayer cloth on which he stands. Some of these have the prayer-niche design identical with those of the Moslems. The Samaritans always face their Holy of Holies (the holy rock on the crest of Mount Gerizim) when worshiping.

THE TRENCH-ALTAR PREPARED FOR THE SAMARITAN PASSOVER

Two large copper kettles filled with water are placed over this altar. At a short distance, and higher than the altar level, is the *tanoor*, or ground oven, for the sheep-roasting. The men in the right background are tending the oven.

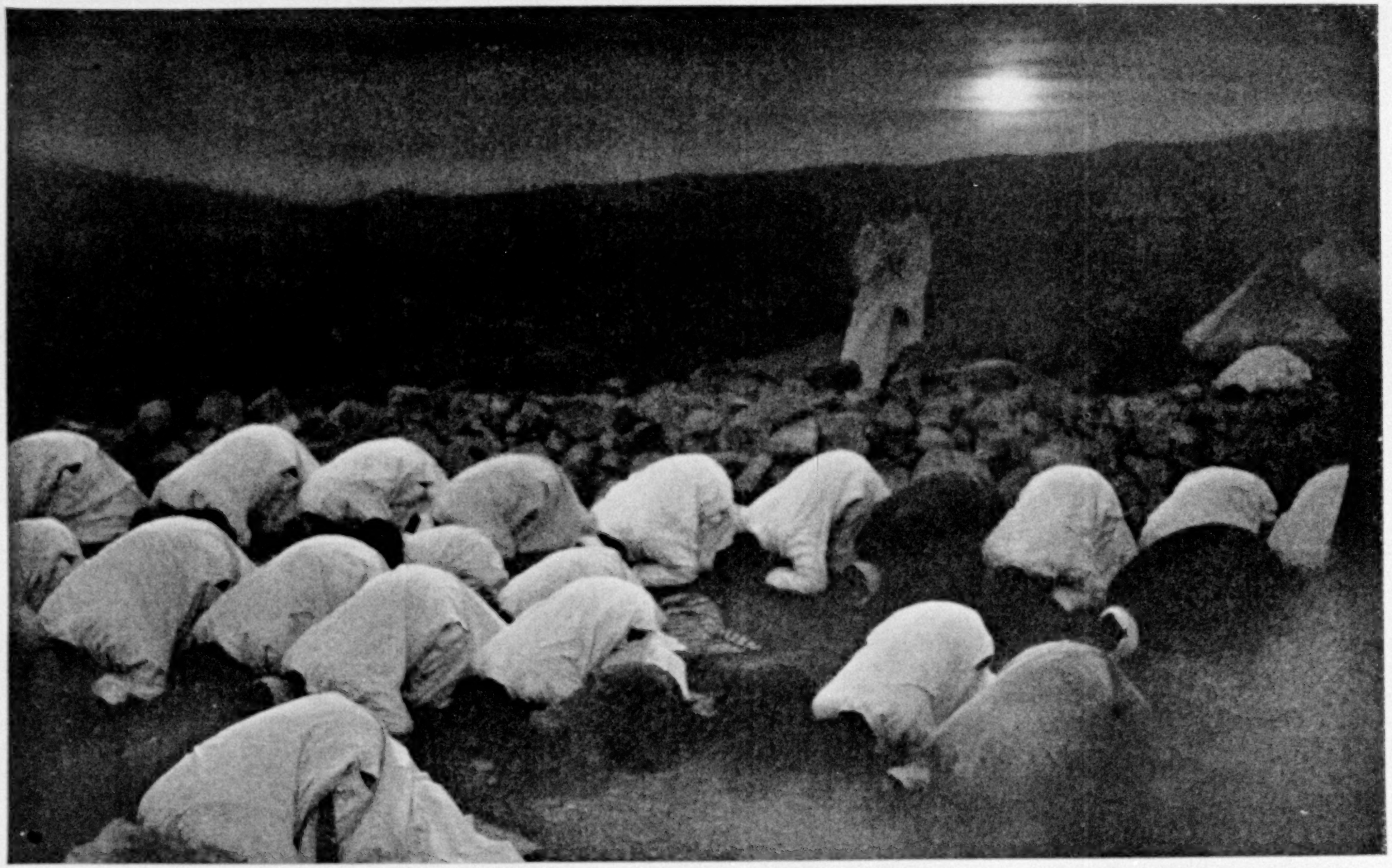
Omri, the sixth king of Israel, in the ninth century B. C., bought an isolated hill a few miles west of Shechem, on the north side of the valley, and there built his capital, naming it Samaria, after its original owner. At the time of the First Captivity the Kingdom of Israel lost its northernmost tribes and its possessions beyond the Jordan. From them Galilee was then created, while the remaining southern part inherited the name of its once important capital, Samaria, and became a State subject to Assyria. Thus was the land cut up into three districts—Galilee, Samaria, and Judea.

SEBASTE, CITY OF HEROD

The city of Samaria, from its inception, overshadowed its rival, Shechem, and probably attained the height of its glory under Roman rule; for the Emperor Augustus presented it to his procurator, Herod the Great, who rebuilt and embellished it after the Roman style, and renamed it Sebaste (Greek for Augusta). Much of Herod's work still remains, notably a double colonnade encircling the hill's crest.

An Arab proverb says, "Beyond every mountain ascent there is a descent." And Sebaste, after climbing to the zenith of power, slowly relapsed into insignificance; so that today, amid the ruins of its splendid past, a squalid mud village bears the once grand title (the name in Arabic being slightly altered to "Sebastieh"). Here is a rare instance, possibly the only one in Palestine, where the Greek name has outlived the older Semitic form.

Sebaste had become a place of no importance more than four centuries before the Emperor Vespasian founded Neapolis (New City) in the Shechem vale, west of the older town, in 67 A. D. This "New City" soon outstripped the older Shechem, and in the fourth century became one of the foremost cities of Palestine—a distinction which it still enjoys under its Arabic name of Nablus.



THE ANCIENT HEBREW PRAYER POSTURE SURVIVES TODAY ON MOUNT GERIZIM

So reverent were the ancient Hebrews that the name of their God never was pronounced publicly, a fact which gave rise to the "coined word," Jehovah, by which the God of the Old Testament Israel now is known. The proper term was "Yahweh." When this word occurred in Hebrew texts another name, "Adonay," was substituted by the priest, and to warn the reader against pronouncing the Holy "Yahweh" the substitute word frequently was printed under the true name. When the Christian translators of the Middle Ages undertook to make the Bible intelligible to the peoples of Europe they apparently did not know what to make of this double term, so they combined the consonants of "Yahweh" with the vowels of "Adonay" to form the "Jehovah" of the King James version.

The Samaritan religion is closely akin to that of the Jews, the chief differences being that the cult of the former centers about Gerizim, while that of the Jews centers about Zion, and that the Samaritan canon of Scripture is restricted to the Pentateuch, or "Five Books of Moses." The later writings, including the Prophets and Psalms, the Samaritans repudiate as uninspired.

In view of the similarity in their beliefs and practices, it seems strange that there exists and always has existed the fiercest animosity between Jew and Samaritan, but it is the animosity that invariably exists between an original and a schism.

The Samaritans maintain that they are the remnants and descendants of the once great tribe of Ephraim, and that the split between them and the Jews came about through the maladministration of the priesthood by Eli's sons. Followers of the Jewish Church are looked upon as dissenters from the pure faith of Israel, and the forming of a center of worship in Jerusalem by Judah is condemned upon the ground that the land of Ephraim, with Shechem and its mountains, figured in the earliest history of the Hebrews; that here the first Israelitish altars were erected, and that these were the only specific parts of the Land of Promise mentioned by Moses in the wilderness.

THE RENOWNED SAMARITAN SCROLL PHOTOGRAPHED AT LAST

The most precious document of this sect is the renowned Samaritan scroll Pentateuch. This scroll is some seventy feet long, and toward the end its columns are divided vertically by a small gap, often occurring between the letters of the same word. Into this gap is carried and written any letter that occurs in the lines which fits into the writing of the date, so that when reading the text it fills its place, while on the other hand these separated letters when read collectively from the top of the column to the bottom, like the Chinese, spell out the name and date of the writer, etc., thus making it impossible for the date to have been of a later writing than that of the scroll itself.

The Samaritans assert that the scroll was written by Abishua, the great-grandson of Aaron, in the early years of the entrance into Canaan, but no impartial student will allow it this very remote origin, although it is believed to be the most ancient copy of the Pentateuch in existence.

So jealously guarded is this scroll that few non-Samaritans have ever seen it, and many of the Samaritans themselves have not seen it except as it is exhibited on rare occasions at feasts, rolled up and covered with a silken cloth and with but one column exposed.

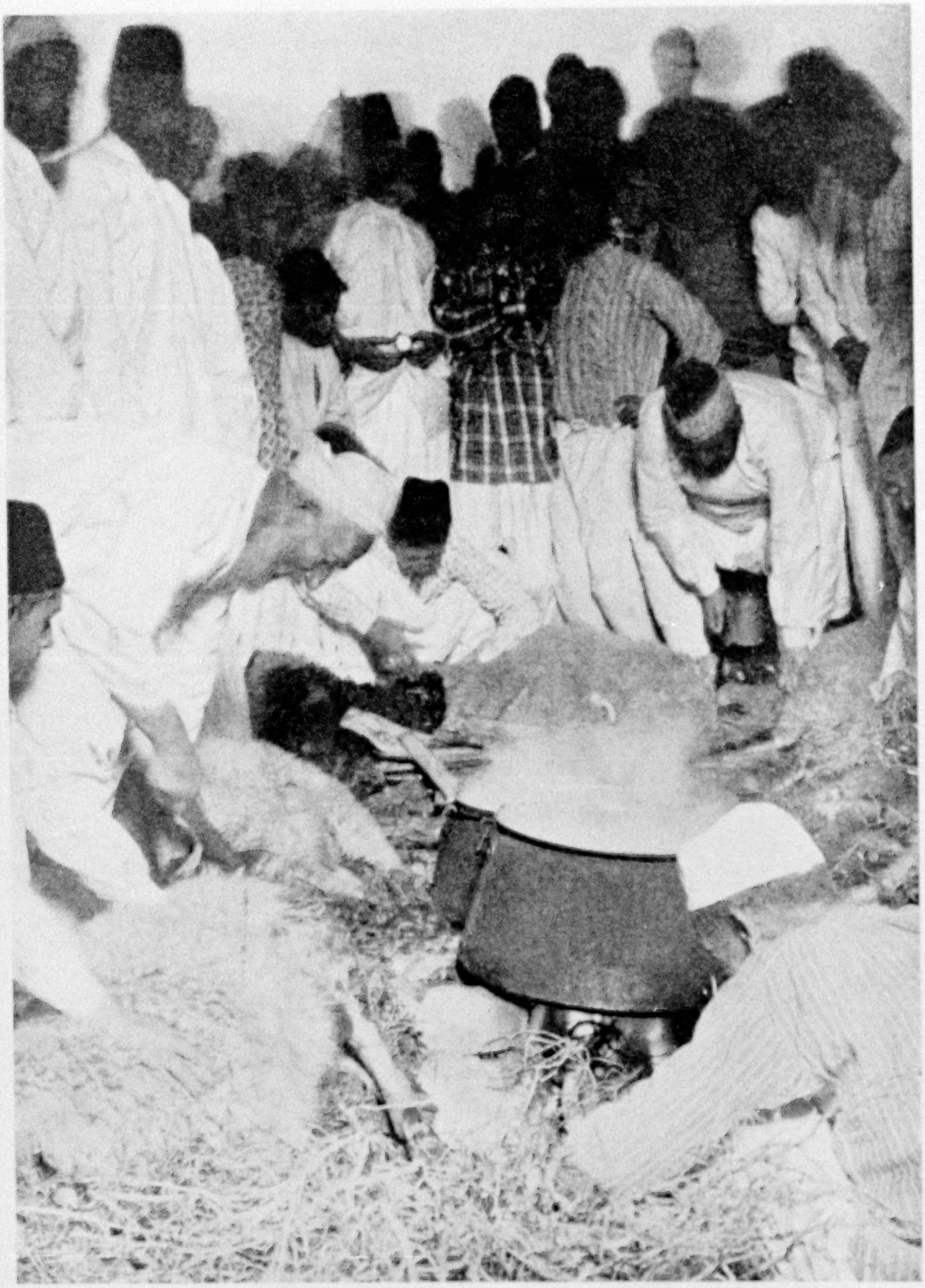
The scroll has recently been photographed from end to end, and will soon be published for the benefit of Hebrew scholars.

It is, of course, impracticable to display this very fragile parchment continually, but it is unfortunate that the modern Samaritans impose upon their guests by showing them a scroll of much later date than the one which all so covet to see. The imposition has gone further, for all photographs made heretofore supposedly of the original Abishua scroll, as it is called, have in reality been of the later copy.

While the Jews have scattered all over the world since the captivities and have absorbed much that is foreign, in many instances adapting their religious practices to their new environment, the Samaritans have during the same lapse of time lived in the land of their forefathers, among Semitic peoples akin to the Hebrews, and because of this fact have handed down to the twentieth century a glimpse of the old Jewish Church almost in its purity. A notable instance of the survival of an ancient religious ceremony is the celebration of the Passover Sacrifice.

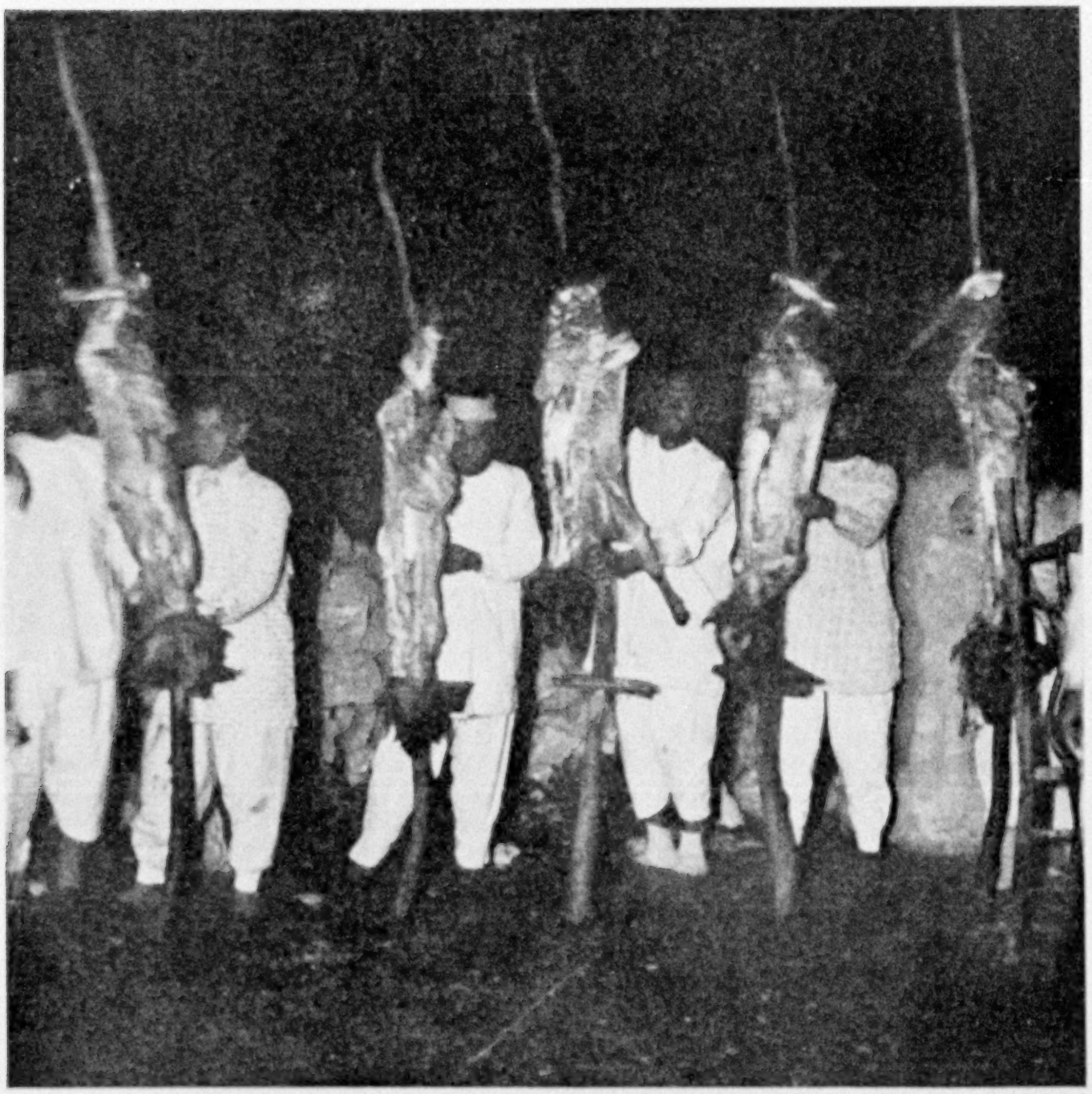
One of the distinctive differences between the Samaritan and the Jew lies in their methods of computing the calendar. Instead of adopting the lunar year solely, the Samaritans base their calculations on the moon but they are at the same time also governed by the movement of the sun. The system is so complicated as to form one of the chief studies of the young priests. Basing their authority on the first chapter of Genesis for thus differentiating from the Hebrew calendar,

XUM



KILLING THE PASSOVER SACRIFICE

The caldrons of water are already boiling. "Then shall all the convocation of the assembly of Israel slay it between the two evenings." As these words are read, with one deft stroke downward, each of the three slaughterers cuts the throat of one lamb and jumps to the next.



THE SPITTED SACRIFICIAL LAMBS

On oaken spits slightly longer than the depth of the ground oven, the dressed lambs are placed lengthwise, the heads hanging down. "Eat not of it raw, nor sodden at all with water; his head with his legs, and with the purtenance thereof."

they point out that, in the history of creation, when the sun and moon are introduced, it is said of them jointly, "Let them be for signs, and for seasons, and for days and years" (Gen. 1:14). For the above reasons the Samaritans some years celebrate their Passover with, or nearly with, the Jews, while at other times their fourteenth of Abib comes a month behind.

PREPARING FOR THE FEAST OF THE PASSOVER

A few days before the Passover the Samaritan ghetto becomes the scene of much activity. Mules and donkeys are loaded with tents and other necessities, while young and old, sick and well, quit their homes to make the pilgrimage to Gerizim, in obedience to the command, "Thou mayest not sacrifice the Passover within any of thine own gates, but in the place which Yahweh thy God shall choose to make a habitation for His name." Often, persons seriously ill are carried in their sick beds to the camp, and here not infrequently babes are born.

Prior to the date appointed, much time is spent in arranging the camp, rebuilding the *tanoor*, or ground oven, used in

roasting the sacrifice, and in procuring the necessary wood and brush for fuel.

The ascent to the camp spot on Gerizim requires usually an hour, whether mounted or on foot. Nablus is left behind by a path leading up from its western suburbs, and passing the Samaritan cemetery, an open field, its rocky and stone-strewn surface overgrown with weeds on which donkeys and cattle may be seen browsing. The trail leads up in short, stiff, winding courses through a slight depression where olives and other trees grow vigorously. The way soon becomes so steep that beasts as well as pedestrians are forced to halt at intervals for breath. But the time is not wasted, for the view of the town in its glaring whiteness below, fringed with verdant gardens and nestling between the twin mountains, is a scene truly beautiful.

THE ENCAMPMENT OF THE ISRAELITES

Once up this steep ascent, the ridge is gained. Along it the path, now fairly level, leads to a slight depression in the saddle, where suddenly the visitor sees before him more than forty white Egyptian and Damascus tents, the only veritable Israelitish encampment of religious significance in the world.

A pity it is that these more modern tents are used instead of the primitive goat-hair ones of the Bedouins, which would more nearly, if not entirely, resemble those used during the Exodus.

To the east, towering above the encampment, is the loftiest of Gerizim's peaks, crowned with ruins, a spot where once temples stood.

It is Passover eve. Selected sacrificial lambs are contentedly wandering about, unconscious of their impending fate. They have been purchased some days in advance of the Passover, in obedience to the law, "in the tenth day of this month they shall take to them every man a lamb. . . . Your lamb shall be without blemish, a male of the first year. . . . And ye shall keep it up until the fourteenth day of the same month."

But the scene is not quiet. Scores of people, non-Samaritan, young and old, have come up to "smell the air," for to the Nablus people, and especially for the lads, it is a day of excitement not to be missed.

The camp ground is a small, elongated field, the property of the Samaritans. No special system is observed in pitching the tents, beyond leaving a path between the two uneven rows. Each family has one tent; a few have two.

At the eastern extremity of the camp is the *kinisch* (synagogue), where the religious rites are observed while in camp. It is a small, oblong plot surrounded by a low rubble wall except to the east, where terrace above terrace, now much dilapidated, rises in step form to the mountain crest beyond.

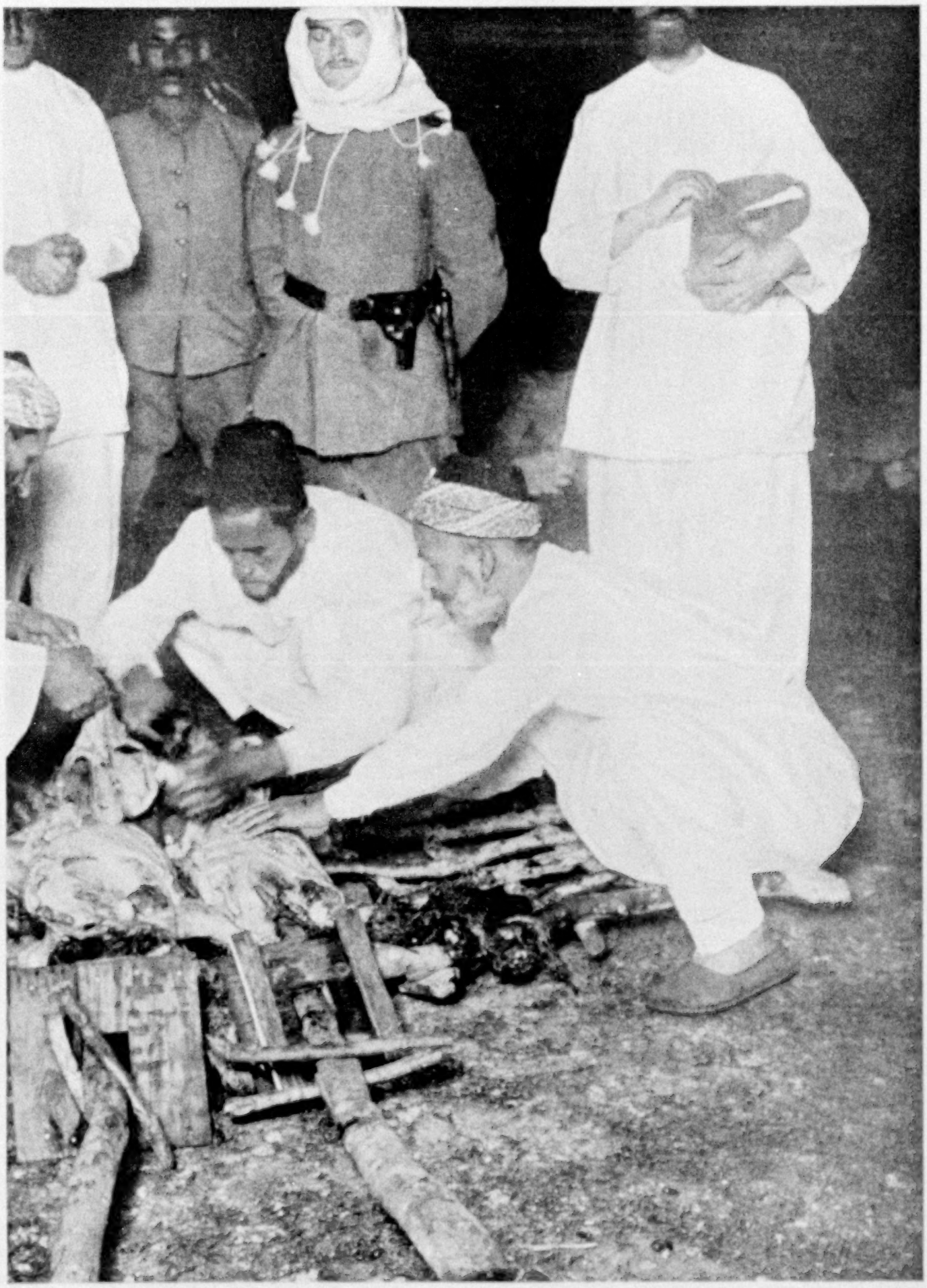
THE TRENCH-ALTAR

At the northern end of this space, or prayer inclosure, a trench has been dug and lined with uncut stone. "An altar of earth shalt thou make unto me. . . . And if thou wilt make an altar of stone, thou shalt not build it of hewn stone; for if thou lift up thy tool upon it, thou hast polluted it."

Across this altar two large copper kettles, filled with water, are placed. Beyond the northeastern end of the inclosure, and higher than its level, is the *tanoor*, or ground oven, for the sheep-roasting. It is a pit, the depth equal to a man's height, from five to six spans in diameter, and lined in a circular form, like a well, with rough stones. Here the rock crops out so near the surface that, in order to get the *tanoor* deep enough, it has to be built partly above the surface and a terrace filled in about it, thus of necessity elevating it above the rest of the space devoted to the Passover observances.

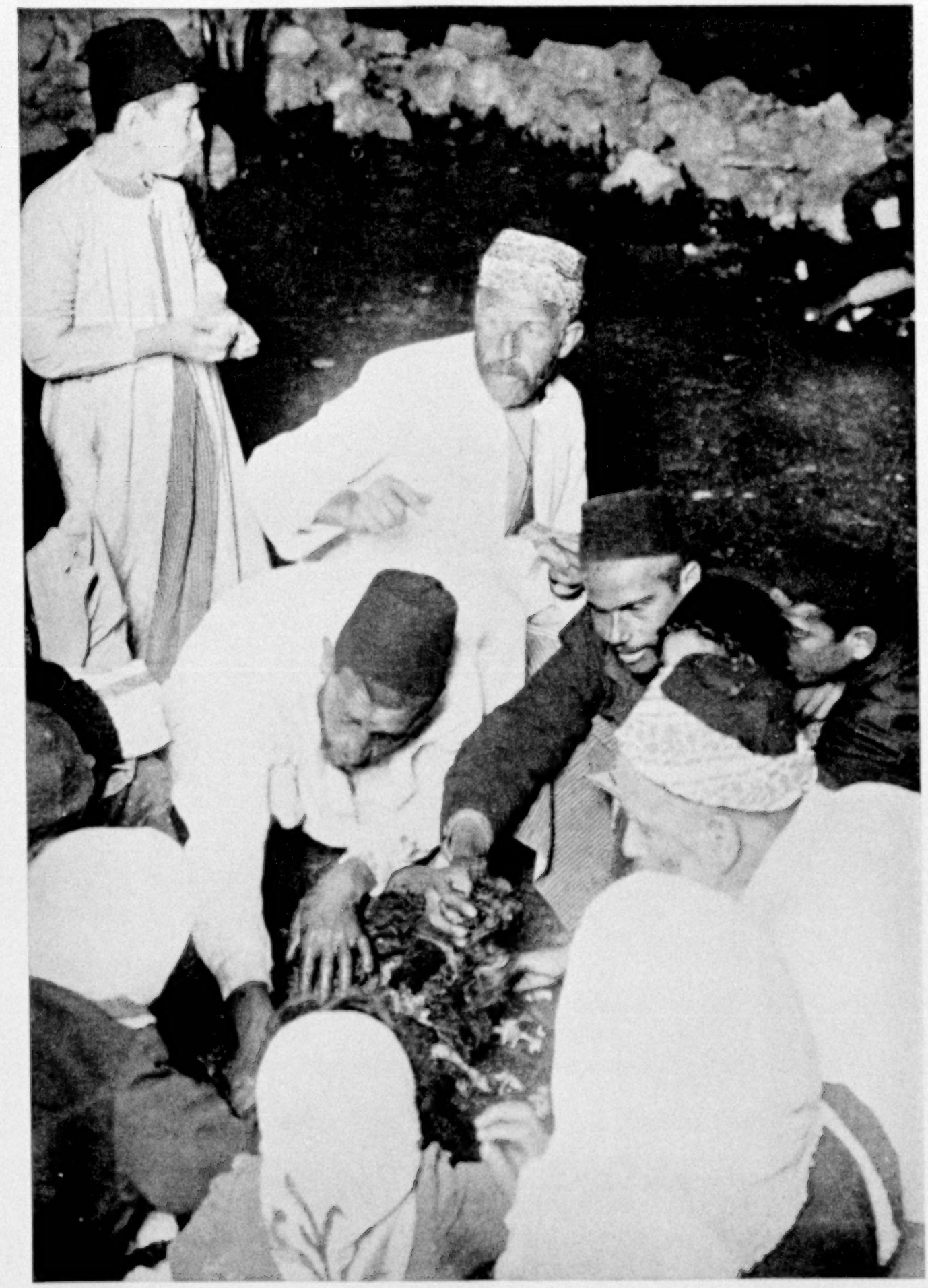
It is about three hours before dark as we arrive, and since the Samaritan time starts its count from sunset, let us forget our Western watches while we remain on Gerizim's heights.

On approaching the camp, one of the first things to attract our attention is the cloud of smoke pouring forth from the *tanoor* and curling skyward from beneath the kettles, for five hours of steady heat produced by burning "saris" brush and thorn bushes are required before the oven is ready for fleecing the sheep.



THE SALT COVENANT

As the preparation of each lamb is completed much salt is rubbed into the flesh. "And every oblation of thy meat offering shalt thou season with salt, neither shalt thou suffer the salt of the covenant of thy God to be lacking from thy meat offering."



"NEITHER SHALL YE BREAK A BONE THEREOF"

No forks, knives, or spoons are used at the feast and great care is observed not to break a bone. The fingers are the Samaritan's only eating utensils on this occasion.

EATING THE PASSOVER

The members of the six families collect, each around one of the lambs—men, women, children, and nursing babies.

To escape the confusion caused by the swarms of sight-seers, boys galloping about on their horses or urging on lazy donkeys, hawkers calling out in loud voices as they peddle small cakes, oranges, or sweetmeats, we follow a friend, one of the priests, up to the crest of Gerizim. This, to the Samaritan, is the holiest part of the earth and crowded with sacred spots and associations.

THE SACRED SITES OF GERIZIM

Here one is shown the place where Joshua built the first altar of sacrifice with twelve stones taken from the Jordan. Just above it are the foundations of St. Mary's Church, built by the Emperor Zeno and restored by Justinian. Adjoining these ruins is a small domed mosque, Sheik Ghanim, now in a neglected condition. A Moslem shrine and a Christian church each in succession built on the site from materials supplied by the remains of a Roman temple!

Proceeding southward along the outmost ledge of the plateau, the priests point to spots where tradition says the altars of Adam and of Noah stood. Be-

"YE SHALL LET NOTHING OF IT REMAIN UNTIL THE MORNING"

The feast itself is of short duration. After the meat has been eaten the high priest, leaning picturesquely upon his staff, recites a short prayer. Every bit of bone remaining is now collected and taken to the altar. "And that which remaineth until the morning ye shall burn with fire." Note the two crouching figures in the foreground busily engaged in collecting and eating fragments of the roasted meat.

low is the path by which Adam was expelled from Paradise, after having been created from the dust of Gerizim.

Beyond is the altar of Seth, a stone circle with a pavement of large uncut stones (probably of megalithic origin).

Just beyond Seth's shrine, farther south, is a ditch sunk into a rock protruding boldly from the mountain side. It is the Samaritan rival to Mount Moriah, in Jerusalem. Here the Samaritans believe that Abraham prepared to offer up in sacrifice his only son, and just behind is the place where the ram was found caught in the thicket.

Almost at our feet, far below, in the plain of Askar (Sychar), lay Jacob's well, concealed beneath an uncompleted church erected upon Crusader foundations. Under the spell of the hour and the scene, one could almost picture the Samaritan woman pointing to Gerizim and saying to Jesus, "Our fathers worshiped in *this* mountain, and ye say that in Jerusalem is the place where men ought to worship" (John 4: 20).

THE SAMARITAN HOLY OF HOLIES

In the center of the plateau is a large flat rock which the Samaritans call "Kuds el Akdas"; for, according to their tradition, it formed the Holy of Holies of their temple. They approach it only on certain festal occasions and with bared feet. This rock at once calls to memory the rival Rock Moriah lying beneath the gorgeous Dome of the Rock in Jerusalem.

Although less extensive than that from its taller mate, Mt. Ebal, which cuts off the distant Galilee view northward, the scene from Gerizim is broad and grand. In the spring the Plain of Moreh, or Sychar, just at its feet, is a patchwork of small fields in different stages of growth. Near the village of Askar (Sychar), watered from a copious spring, large patches of onions and garlic flourish, their green varying with that of the waving barley and wheat beyond and contrasting with the bare and rocky surrounding hills. The elevations are dotted with villages, and among them, to the southward, is Awerta, where, under the shade of a great tree, the tombs of Aaron's son and grandson, Eleazer and Phinehas, lie.

Directly to the east, separated from the foreground by the deep Jordan chasm, rise the Mountains of Gilead. Like Moab, of which they are a continuation northward, they are suffused with a mysterious and fascinating translucent blue, resembling some precious stone, and never cease to captivate the vision, especially upon clear days. The highest peak, Jebel Osha, crowned by the reputed tomb of Hosea, stands out conspicuously. Towering at the head of the Jordan Valley, Hermon, with its perennial snow-cap, closes the northern limit of this eastern view.

At the foot of Mt. Ebal and bordering upon the plain directly below us are the excavations of ancient Shechem. Near them a small white dome marks the traditional site of the tomb of Joseph. Southward the view stretches over the long mountain range which is the backbone of Palestine, rising between the Phœnician plain and the deep Jordan chasm. When viewed from the Mediterranean, the only break seen in the range is this Valley of Nablus, while its rivals in historic importance, Jerusalem and Hebron, are hidden from view. Mizpah is easily visible, but no glimpse of Jerusalem save a little of its suburbs under favorable conditions.

Turning westward, the mountains and hill country, dotted with villages, drop off gently into a plain which extends to the blue Mediterranean. The ruins of Cæsarea, which under Roman rule became the most important city and seaport in Palestine, and often connected with the history of the Apostles and the early Church, are visible under favorable conditions; also the orange groves of Jaffa.

Now the sun is soon setting, and we shall have to hurry back to camp if we are to see all the service which commemorates the Exodus from Egypt.

PRAYER POSTURE AND ROBES SIMILAR TO MOSLEMS

As we descend, white-robed figures are seen collecting about the smoking trench-altar. As they slowly gather one by one they spread on the ground small prayer cloths, upon which they stand with bare

THE BURNT OFFERING

All the viscera are emptied of undigested food and then thoroughly salted and with the fat from the inwards and kidneys are placed upon cloven pieces of wood laid across one end of the trench-altar. The burning goes on slowly till the early morning hours.

feet, having discarded their prayer slippers.

While witnessing this ceremony we were impressed by the striking resemblance to the Moslem garb and posture during prayer. The clothing of the Samaritan on this occasion is, in the main, white, the outside garment being a *jubbie* made of muslin, identical in cut with that worn by Mohammedan religious sheiks and by the old-style city Moslems, who happily are not adopting western ideas and modes of clothing. Around a dome-shaped fez the priest winds a white turban, sometimes embroidered in amber silk.

The older men of the laity use the same turban, with the customary flat-topped fez, while the young men and boys, like the Mohammedan youths, wear no turbans and are usually clad in white shirts and drawers. The Samaritans, except when in prayer, wear deep wine-colored turbans, as the result of an edict of one of the caliphs, to distinguish them from their Mohammedan neighbors, for originally they wore white and were often mistaken for Moslem sheiks learned in the Koran. Similarly, the Jews formerly used black as a distinguishing hue.

Before all prayers, the Samaritan goes through prescribed ablutions, washing with water three times each the hands, mouth, nose, face, ears, and feet, in this order, and, like the Moslem, he spreads the prayer cloth, which in some instances has the *mihrab* design.

FACING THE HOLY OF HOLIES

Now all have congregated. The venerable high priest, Yakoub (Jacob), feeble and infirm, clad in a pale-green *jubbie*, takes his place in front of the congregation. The two second priests, Ishak (Isaac) and Tewfik, stand slightly behind the high priest. Then come in rows the elders according to rank. Now all the males of the community are present, the smallest boys lining up at right angles to the foremost ranks.

On every hand the walls and terraces are jammed with onlookers, mostly boys and youths of Nablus.

Facing the holy rock on the crest eastward, the worshipers now bow to the earth in prayer, for the Samaritans always face their Holy of Holies wherever they are.

The service begins with a prayer written some seven centuries ago by the priest Hassan el Suri. As it is repeated in concert, the rows of the older men and the priests kneel, or rather sit upon their heels, with hands on the knees or outstretched to heaven whenever any petition is asked. They bow their heads in unison, touching their foreheads to the ground. Some of the younger men standing behind, also with outstretched hands, join in the prayer. Throughout the service it is most interesting to watch the tiny little fellows, each beside his parent, while all follow in the repetition with as much earnestness as the grown-ups and entirely unconscious of their surroundings.

Simultaneously with the beginning of the service the sacrificial lambs have been driven into the inclosure and wander about at will, grazing upon the few tufts of green or treading upon the high priest's prayer rug till driven off.

The prayer is ended with a loud Amen! Whereupon all rise and remain perfectly erect, while in silence they repeat another prayer, called "Akid el Niyeh," a meditation which denotes the consecration of their souls to prayer. It consists of repeating the five articles of their creed—belief in God, in Moses, the Pentateuch, Mount Gerizim, and the Day of Judgment.

This and the story of creation precede all prayers. When ended a hymn is sung in praise of Yahweh, the little fellows stretching their mouths to their utmost capacity, while the older leaders, turning about from time to time, prompt and encourage the others to more fervent utterances. All these prayers, readings, and hymns are, of course, in the Samaritan Hebrew, the oldest form of that language in use.

Next, from the hand-written Pentateuch which each carries, they read in unison 21 selections, in which Abraham, Isaac, and Jacob are mentioned ("in memory of the fathers"). During the reading each time God's name is mentioned the men stroke their beards downward thrice. Likewise whenever passages are recounted enjoining them to remember their God, they bow, swinging the body

BETROTHED

Among the Samaritans, as with most Orientals, the parents of the children arrange the matches. The betrothal often takes place when the bride and bridegroom are mere infants, while early marriages are the rule.

forward from the hips, in token of reverence and submission.

The high priest, who has been facing the crest of Gerizim with the congregation, now turns about and repeats an antiphon, to which the leading men reply, and in conclusion a psalm is sung.

The aged high priest now mounts the fragment of an ancient column and in a low, quavering voice sings a short hymn. With his eyes upon the setting sun, he reads the first twelve verses of the twelfth chapter of Exodus, wherein are given the first commands regarding the observance of the Passover.

KILLING THE SACRIFICE

In the meantime the youths and boys have carried out the lambs and are holding them in a circle about the trench-altar, where the caldrons of water are already boiling.

Over the lambs stand three slaughterers with glistening knives of razor sharpness, for, like the Jews, only those recognized as knowing the laws regarding *kosher* and *taraf* (ritually clean and unclean meat) are allowed to do the killing. As the reading proceeds, it is so arranged that, as the passage "then shall all the convocation of the assembly of Israel slay it between the two evenings" is spoken, at the word "slay," with one deft stroke downward, each of the three slaughterers cuts one throat and jumps to the next.

In a few seconds all have been sacrificed, the white clothing of the boys holding the struggling lambs being much bespattered with blood. Thus the passage "between the evenings" the Samaritans translate to mean between sunset and dark, the twilight hour in these lands being very short. "Thou shalt sacrifice the Passover in the evening, at the going in of the sun, at the very time thou camest forth out of Egypt."

As the slaying commences the great throngs of Samaritans and Gentiles cease to crowd about the priest who is reciting and press around the altar. All is a veritable Babel, with prayers repeated, shouting, singing, and clapping of hands.

The joy exhibited is akin to that of our children on Christmas morning or when around the blazing tree, and reminds one of the light-heartedness of the Jews when celebrating the feast of Purim, commemorating as it does the destruction of their enemy, Haman. During all this excitement some of the little Samaritan girls and boys make their way among the sacrifices, and the latter with their finger ends dot their faces with daubs of the paschal blood.

One of the young priests collects a quantity of the fresh blood in a basin and

with a bunch of wild thyme vigorously stirs it; then rushes away to put a dab of it above each tent door. Upon returning he empties the remainder into the fiery ditch. "And ye shall take a bunch of hyssop, and dip it in the blood that is in the basin and strike the lintel, . . . for the Lord will pass through to smite the Egyptians; and when he seeth the blood upon the lintel the Lord will pass over (Passover) the door, and will not suffer the destroyer to come unto your houses to smite you" (Ex. 12:22, 23).

Incidentally it is of great interest that the thyme is used. Botanists have differed as to what herb the hyssop might be. Here we learn that this wild thyme has properties which keep the blood from coagulating. Besides, this custom having been handed down in unbroken succession, little if any room is left for doubt as to its identity with hyssop.

UNLEAVENED BREAD AND BITTER HERBS

While the lambs are giving their last life struggle, youths pass among the people bearing large trays piled high with bitter herbs, a sort of wild lettuce that grows on Gerizim, rolled in thin sheets of unleavened bread. Rolls are distributed among non-Samaritans as a token of friendship.

As the killing of the lambs commemorates the sacrifice that saved the first-born of the Hebrews from the fate of their Egyptian neighbors, so here also the eating of the bitter herbs and unleavened bread is a reminder of the bitterness of the Egyptian tyranny and the haste with which Israel left the land of the Pharaohs. "And they baked unleavened bread of the dough they brought forth out of Egypt, for it was not leavened; because they were thrust out of Egypt and could not tarry, neither had they prepared for themselves any victuals" (Ex. 12:39).

The bread is identical with that used by the Bedouin and journeying peasants, since the baking apparatus is simple and portable, and quite likely is akin to that used during the Exodus. The loaf resembles a gigantic but very thin pancake, being pliable and not crisp like the "motsis," or unleavened bread used by the Jews at Passover.

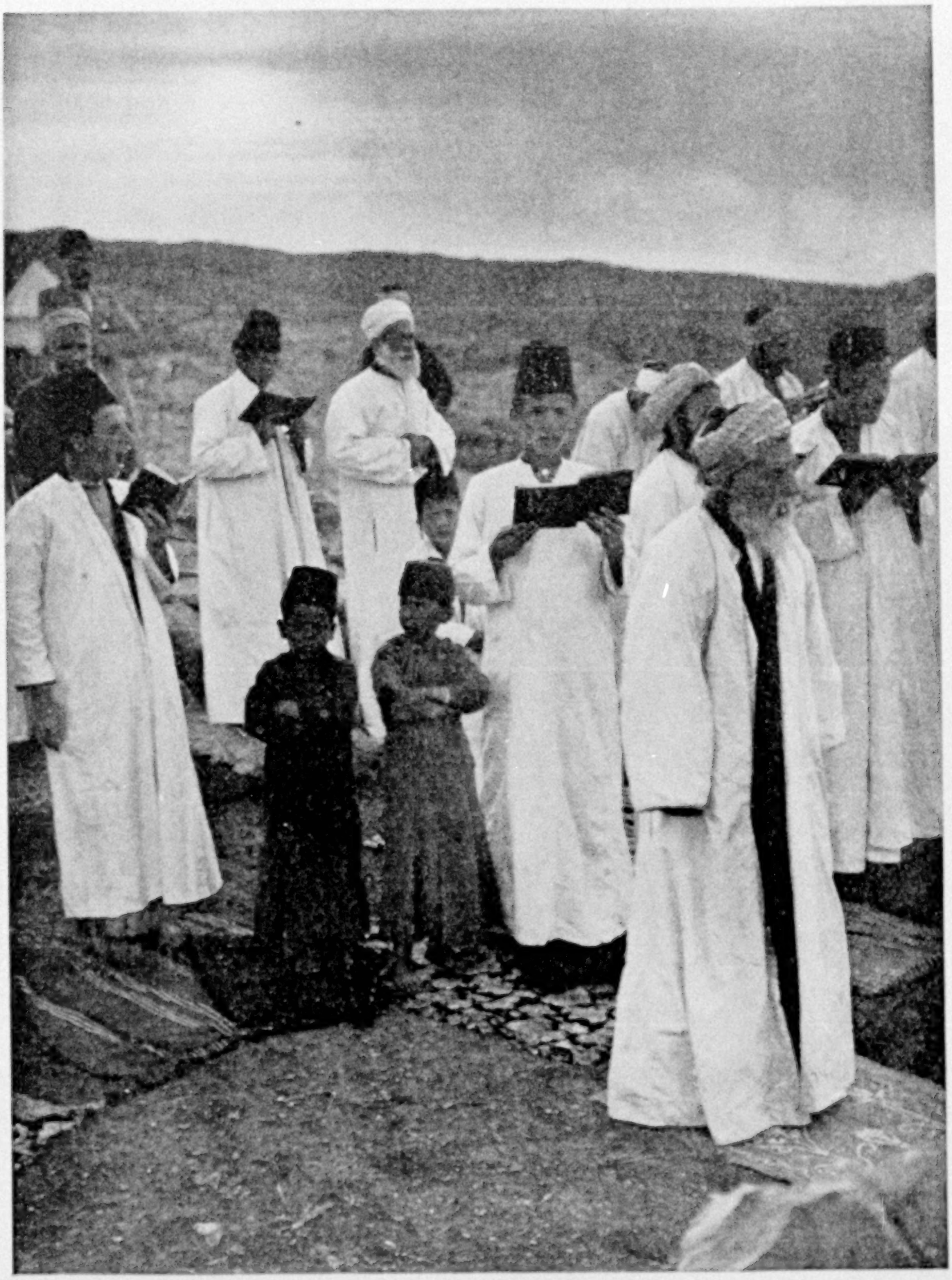
At the sacrificial altar the older men and some of the priests, who now stand about those to whom is delegated the task of dressing the lambs, have kept up the reading of the story of the Exodus as far as to Miriam's song of triumph. Meanwhile, as soon as the lambs have become lifeless, boiling water from the caldrons is poured over them, while several boys and men crowd about in the semi-darkness and pluck off the wool instead of skinning the victims, the object being to protect the flesh while roasting in the ground oven.

A SAMARITAN BABY

When photographed, this child was the picture of health. Shortly after, he became ill and the mother always attributed the misfortune to the "evil eye" of the camera or of the photographer.

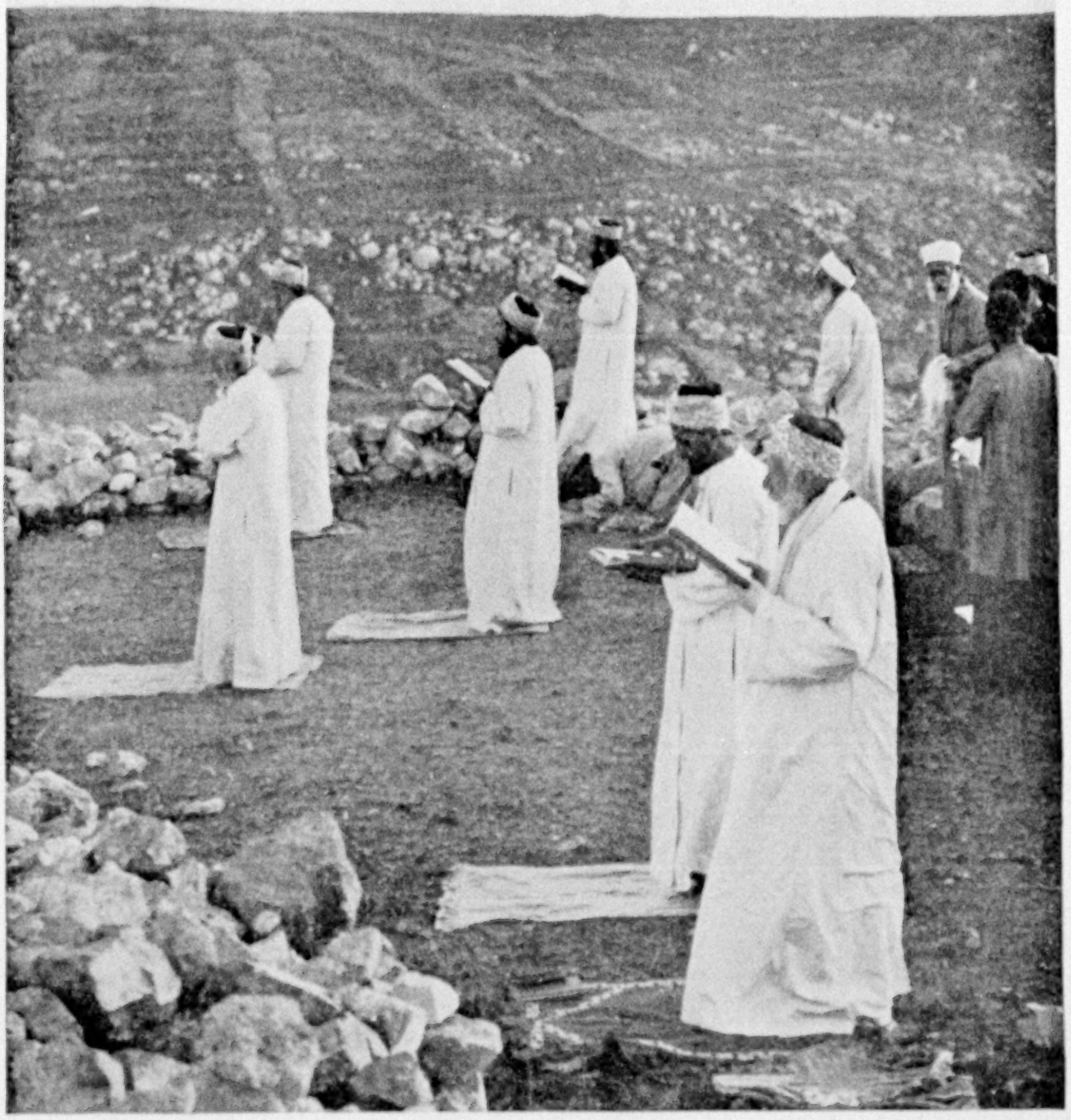
THE RITUAL INSPECTION

Next the ritual inspection takes place, for as each lamb is fleeced it is suspended



SAMARITANS AT PRAYER ON THE EVE OF THE PILGRIMAGE

During the entire week following the Feast of the Passover, the Samaritans remain encamped upon Mount Gerizim. On the last day of the encampment they begin at dawn a pilgrimage to the crest of the sacred mount. Before setting forth on this pilgrimage, however, the men spread their prayer cloths and repeat the creed and the story of the creation in silence, after which, in a loud voice, they read in unison the Book of Genesis and the first quarter of the Book of Exodus, ending with the story of the Passover and the flight from Egypt.



COLLECTING FOR EVENING PRAYERS ON GERIZIM

Before all prayers the Samaritan observes prescribed ablutions, almost identical with the present customs of the Moslems, and like them he now spreads his prayer cloth.

by its hind legs on a long pole resting on the shoulders of two of the men. The work of removing the offal, the heart, liver, and lungs is done by lantern light. Great care is taken throughout this inspection not to mutilate a bone, for the command "neither shall ye break a bone thereof" is strictly observed. Any carcass found ritually unfit is put on the burning altar and consumed with the offal. This, however, is a rare exception. The last time it happened was some five years ago, when a lamb was found minus a kidney.

Unlike the Jews, who will not eat of the hind quarters of any animal until all the sinews have been entirely removed, the Samaritans claim to know exactly the cord the angel touched while wrestling with Jacob at the ford of the Jabbok, and now a deep incision is made in the flank and it is taken out. "And Jacob was left alone; and there wrestled a man with him. And when he saw that he prevailed not against him, he touched the hollow of his thigh; and the hollow of Jacob's thigh was out of joint. . . . Therefore the children of Israel eat not of the

XUM

THE SAMARITANS ASSEMBLED UPON THE SACRED ROCK

A few of the devout members of the congregation do not dare advance to the rock itself because of certain scruples regarding their ablutions. These individuals may be descried in the background kneeling like their brothers on the rock, their faces turned toward the holy spot.

sinew which shrank, which is upon the hollow of the thigh, unto this day" (Gen. 32: 24-32).

Deep gashes are made in the fleshy parts in order that the salt may penetrate, while the right shoulder is cut off to be roasted on a separate spit, being a priestly portion. Pieces of the head are also reserved for the priests. Only the males of the priestly family and women of the same blood, if unmarried into other families, may partake of them. "And this shall be the priest's due from the people, from them that offer a sacrifice, whether it be ox or sheep; and they shall give unto the priests the shoulder and the two cheeks."

Now an oaken spit, the length being slightly greater than the depth of the ground oven, is thrust through each dressed lamb lengthwise, the head hanging downward. To prevent the meat slipping off, a wooden pin is driven through the spit three or four spans above the lower end, and on it rests a cross-board.

As the preparation of each lamb is completed, much salt is rubbed into the flesh. "And every oblation of thy meat offering shalt thou season with salt, neither shalt thou suffer the salt of the covenant of thy God to be lacking from thy meat offering: and with all thy offerings thou shalt offer salt" (Lev. 2: 13).

THE BURNT OFFERING

This mandate is also closely observed in the matter of the burnt offering, for the viscera as collected are emptied of undigested food and then thoroughly salted, and, with the fat from the inwards and the kidneys are placed upon cloven pieces of wood laid across one end of the ditch-altar, and the fuel under it now is ignited from the fire beneath the caldrons. The burning goes on slowly till the early morning hours.

But long before these preparations have been completed the readings have come to an end, while all those at work and the onlookers shout incessantly, "We call and

HANDS OUTSPREAD TO HEAVEN

"And it was so, that when Solomon had made an end of praying all this prayer and supplication unto the Lord, he rose from kneeling on his knees with his hands spread up to heaven." It was then the custom with the Hebrew nation, as still with the small remnant of the Samaritans, to spread forth the hands toward heaven. One object entirely out of harmony with the picturesqueness of this scene is the 20th century steamer chair in the center of the group of worshipers. It appealed to the Samaritans, however, as a convenient resting place for the sacred scroll in preference to the quaint but clumsy wooden stands of the synagogue.

we affirm, there is no God but God." In fact, they aim to keep this up all night, but there are numerous interruptions.

Once the service has come to an end, all those not engaged bow forward and kiss the hand of the high priest, saying in Hebrew, "Every year may you have peace." He in turn gives each his benediction and retires to his tent.

HOW THE MEAT IS COOKED

It is now only about four hours before midnight and the sides of the ground oven are glowing with heat. The white-robed figures, with much shouting and commotion, bring the spits forward, holding them in a circle about the fiery pit. With loud voices they repeat, "Hear O Israel, the Lord our God is one Lord," and passages of Scripture in which they are admonished to observe diligently the law.

Suddenly the spits are simultaneously lowered into the oven and a wickerwork lid made of sticks placed over the top, the spits protruding slightly and so held in place. Grass, sod, and mud, previously collected for the purpose, are placed over this, closely sealing the lid, so that no smoke or steam can escape, and thus extinguishing the fire; but the heat of the stones is sufficient to roast the tender mutton. "Eat not of it raw, nor sodden at all with water, but roast with fire; his head with his legs, and with the purtenance thereof" (Ex. 12:9).

THE EVENING PRAYER

Once these duties are over the men again collect for prayer. It is now well into the night. Beginning, as usual, in silence, with their creed and the repetition of the story of creation, Pentateuch selections pertaining to the Passover and

XUM

SAMARITANS BAKING UNLEAVENED BREAD

The bread is made with flour quickly kneaded with water only and baked on a convex disk of sheet-iron. It is identical with that used by the Bedouin and journeying peasants. Since the baking apparatus is so simple and portable, the bread probably is much the same as that used during the Exodus. The loaf resembles a gigantic but very thin pancake.

the patriarchs are read. Between the first selections hymns are sung.

A lengthy rotation now takes place: Joshua's prayer, one that Samaritan tradition asserts he was in the habit of using; singing the song of Moses at the Red Sea, and the "Angel's Song." The main feature, however, is the clothing of the high priest or his representative with a silken cloth. The priest now presents to view one of the ancient Pentateuchs, one in book form, written on parchment.

It is an impressive sight when these white figures in the bright moonlight, kneeling thrice and prostrating themselves to the ground, always toward their Holy of Holies, repeat in unison, "It is a night to be much observed unto the Lord for bringing them out of the land of Egypt; this is that night of the Lord to

be observed of all the children of Israel in their generations."

Thus the three Passover services are ended. The first, before the lambs are slaughtered, is called "Salat el Dabih" (Sacrificial prayers); the next, while the fleecing is taking place, "Salat el Jismeet" (Scalding prayers), and "Salat el Garub" (Sunset prayers). Under ordinary circumstances prayers are always said at even, but since the Passover service is the more important, the evening prayer is unavoidably delayed.

WHERE ARE THE WOMEN?

During the afternoon and the early evening the women have played no rôle in the scene. They have kept to their tents, while those unable to make their ablutions, and therefore prohibited from eating the Passover, are confined in one tent.

Like the older but now passing Jewish and native Christian custom, the Samaritan women do not strictly hide from men, but only veil when on the street and keep out of the way when strangers are present.

The present paper is written after having witnessed the Passover ceremony four times—twice before the great world conflict and twice during it. The first occasion was when the author was a youth, the second in 1914.

On both of those occasions the women were hardly seen, eating their portion of the sacrifice in the tents, some of the little girls alone showing themselves. During the years of the war this phase of the scene materially changed. There were no tourists or professors, with large cork hats and western clothing; no note books and pencils; no inquisitive questions to embarrass the women or to mar the ancient atmosphere of the spectacle.

Once the sacrifice had been slain, the crowds from Nablus, smaller these years than usual, descended and the Samaritans were left alone. In the moonlight there was no sight nor sound foreign to the surroundings to distract one's attention, and the imagination was given rein. The conception wandered back thousands of years, and one only awoke with a start to the reality of living in the twentieth century when a sudden flash of magnesium powder lit up the sky and then left all in deep darkness.

The evening prayers over, some retire to rest in their tents, some pray or read to keep awake, while not a few sit around the smouldering altar watching that every scrap is burned.

No sooner are we left alone with the Samaritans than the women begin to appear. They whose lives are so immersed in small things that they seldom leave their homes, the older women having no education at all, find great pleasure in the freedom of sitting around the sacrificial altar, conversing in their native tongue with Mrs. Whiting, and enthusiastically displaying their babies, awake or asleep, at this late hour.

OPENING THE ROASTING PIT

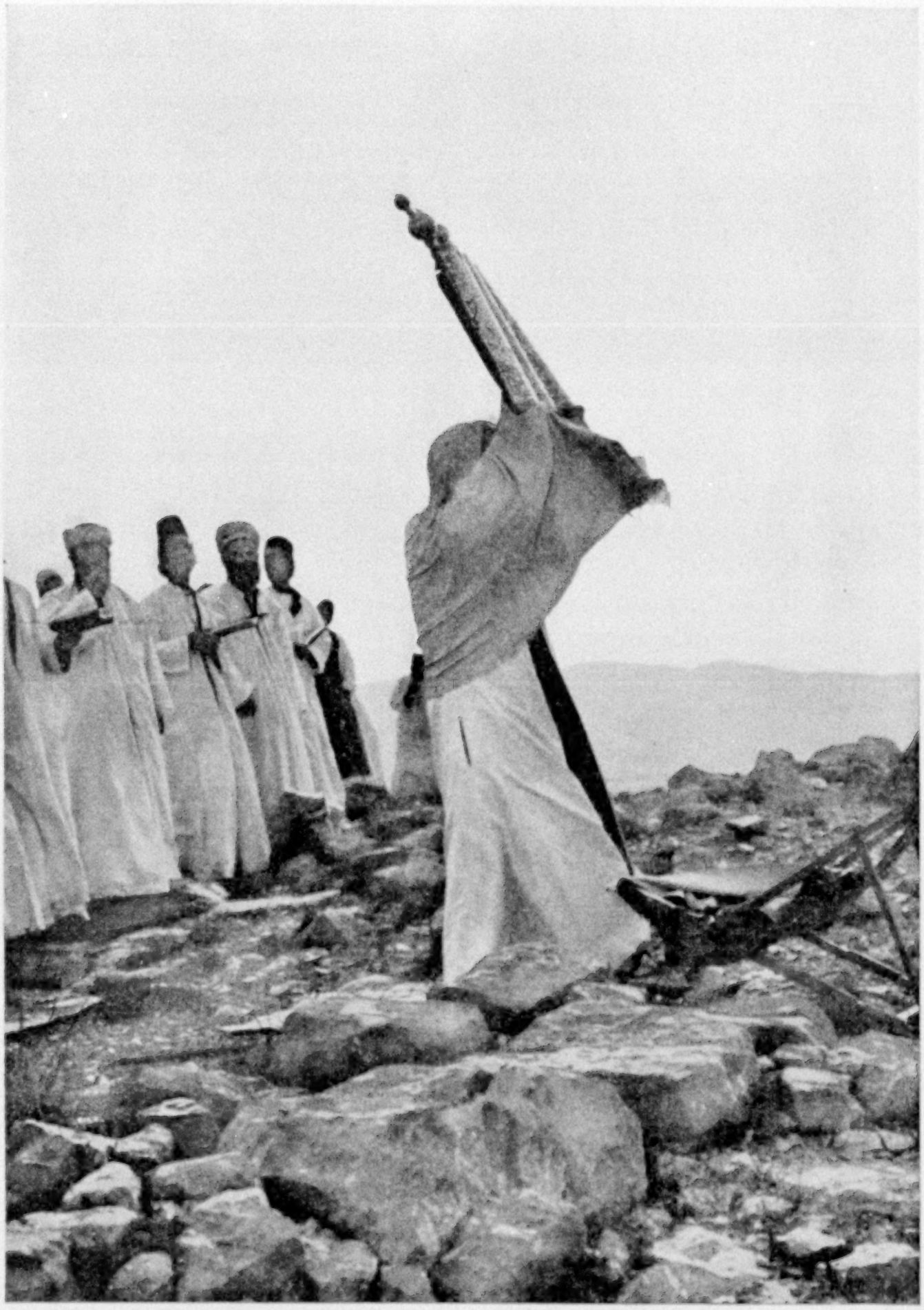
Thus the three to four hours between putting the lambs to roast and the time of the feast roll quickly by. Incidentally we retire to our tent and dine on roast lamb, killed and prepared by peasants of the neighboring villages in identically the same style as the paschal lambs, except that the skin is removed, for no non-Samaritan is ever allowed to partake of the sacrifice. "And the Lord said to Moses and Aaron, This is the ordinance of the Passover: There shall no stranger eat thereof."

It is because of this injunction that the Samaritans so scrupulously collect and burn any scraps cut away during the inspection, and that the burning altar is so rigorously guarded.

Even after the ceremony is at an end, the ditch and oven are filled with stones lest any remaining charred bone or fragment fall into the possession of a Gentile.

As the midnight hour approaches, the sleepers are awakened by callers and suddenly the camp is again astir. The youths with hands and hoe remove the seal from the oven, and clouds of steam pour out; so that, even with the aid of a lantern, little can be seen. It is interesting to notice the air of hurry, although time is of no consequence. The cover is now lifted with much shouting and screaming, and the same prayer said as when the lambs were placed in the oven. At once the spits are withdrawn and closely guarded while the meat is slipped off, each lamb

XUM



WAVING THE SACRED SCROLL, ONE OF THE CEREMONIES DURING THE SAMARITAN PILGRIMAGE TO THE HOLY ROCK, WHICH FOLLOWS THE CELEBRATION OF THE PASSOVER

The high priest, taking the sacred scroll from its resting place, holds it in his arms. Then he raises it over his head and the copper case is unfolded, so that the parchment is exposed toward the devotees, who stroke their faces and beards in reverence.

SAMARITAN PILGRIMS AT PRAYER IN FRONT OF THE HOLY ROCK

During the greater part of the service the high priest with staff in hand stands facing the sacred scroll, which has been placed before the Rock. He leads the congregation in reading.

THE BIBLICAL SALUTATION: PALESTINE

Embracing one another, the head is put on the other's shoulder or neck, the latter being bent forward, and in doing so the cheek or neck is kissed, alternating from one shoulder to the other. "And Esau ran to meet him (Jacob) and embraced him, and fell upon his neck, and kissed him." The Samaritans are the tallest people in Palestine.

into one of the great copper pans, the shoulders being put with the portion for the priestly family and taken to the prayer inclosure, just beyond the still burning altar.

EATING THE MEATS OF THE PASSOVER

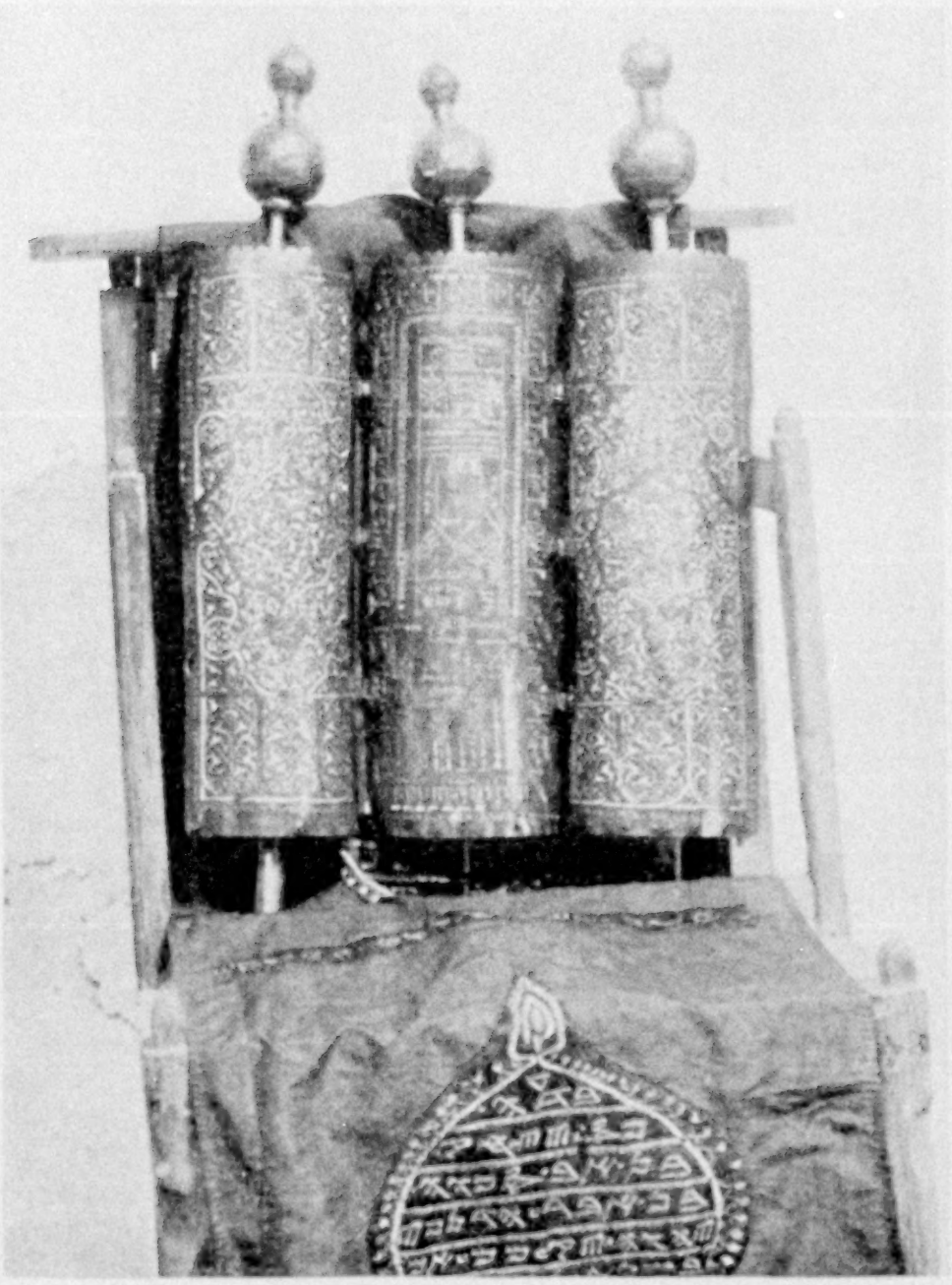
Some of the flesh, being overdone, falls from the spits, and one of the men volunteers to rescue it. Winding bits of sacking about his hands to prevent blistering them, he is lowered into the oven. Quickly the meat is collected in a basket.

Only two men have remained near the pit, and they become so engrossed with the meat basket that the man in the pit is temporarily forgotten. The heat is more than anyone can endure longer than a few seconds, but the shouts of the unfortunate go unheeded until a Gentile sends his fellows to the rescue.

The members of the six Samaritan families have now collected each around one of the lambs—men, women, children, and nursing babies. The elders and the priests arrive, each girded about his

outer clothing, shod and bearing a staff or cane in imitation of the equipment on the flight from Egypt. Now the meat is sprinkled with minced bitter herbs, and straw trays of unleavened bread are placed at hand. The high priest, in the midst, in quavering tones, says: "In the name of God I call, 'Hear O Israel, our God is one God,'" etc., while all voices join in singing an ancient Exodus hymn in which mention is made of the multitudes of Israel that left Egypt as the issue of only seventy souls who went down into that land in the days of Joseph.

Every one now begins to eat ravenously, pulling the meat from the bones with the fingers. No forks or knives are used, and great care is observed not to break a bone. The flesh is consumed quickly, for the devout are truly hungry, having eaten little substantial food during the previous day. "And they shall eat the flesh in that night, roast with fire, and unleavened bread; and with bitter herbs they shall eat it. And thus shall ye eat it: with your loins girdled, your shoes on your feet, and your staff in your hand: and ye shall eat it in haste: it is the Lord's Passover" (Ex. 12 :8 and 11).



THE SACRED SCROLL OF THE SAMARITANS USED ON GERIZIM (REAR VIEW)

The scroll is contained in a copper case inlaid with silver and gold, with designs representing the temple sacrificial altar, table of shewbread, the golden censer, cup of manna, and other temple furnishings.

Those who are unable to leave their tents because of sickness have a portion sent to them, and, no matter how ill, they always partake of a little. Even the nursing babies have their lips touched with a morsel, all in literal compliance with the command that any one refraining from eating it shall be cut off from Israel.

Within a few minutes the meal is over and the high priest, leaning picturesquely upon his staff, recites a short prayer. Every bit and bone remaining is now collected and taken to the altar. Across the end where the offal has been burned the wickerwork oven cover is now thrown, and upon it all the spits are piled, together with the bones and leavings. A fire is lighted under them. Every person now washes with hot water from the ket-

Drawn by A. H. Bumstead

A MAP OF ASIA MINOR AND THE HOLY LAND

Showing the home cities of the Seven Wise Men of ancient Greece (see the succeeding article) and the land of the Samaritans. (Note, in the small inset map, the relative location of Mount Gerizim and Mount Ebal and the historic cities, ancient and modern, which have clung to their slopes—see text, pages 1–21).

tles, pouring it over his hands from ewers, so that it also flows into the ditch-altar, lest even this infinitesimal quantity of the sacrifice should fail to be destroyed by fire. "And ye shall let nothing of it remain until the morning; and that which remaineth until the morning, ye shall burn with fire" (Ex. 12 : 10).

Thus the sacrifice and ceremony commemorating the Exodus are ended.

Each celebrant now goes to his tent for a few hours' sleep. Early the next morning the congregation again gathers for prayers, the day being observed as a Sabbath; the first day of the feast of unleavened bread.

As the onlooker retires to his tent or descends the path to Nablus in the hush of early morning, the scene, brightly lit by the moon, is one not to be forgotten.

From beyond the camp a great white cloud of smoke curls skyward. Now and then a red flame licks the sky or a white, ghost-like figure adds some fuel. It is a picture which cannot be reproduced with the camera; only to the mind's eye can it be painted. The wood-cuts and steel-engravings found in our old family Bibles, where the Israelitish camps are shown with the pillar of cloud and fire, come nearest the present reality, but are lacking in color and atmosphere.

As we turn for one last glance at the moon-lit camp and the redder glow of the flame with the pillar of smoke, we cannot but realize that here we have seen the eating and burning of the last Hebrew blood sacrifice, and there comes the thought that it may never be seen again, for the Samaritans are a dying people.

ASIA MINOR IN THE TIME OF THE SEVEN WISE MEN

By Mary Mills Patrick

President of the American College for Girls, Constantinople

ASIA MINOR was the home of the Seven Wise Men, with some exceptions. There is great disagreement among ancient authorities as to who all of the Seven Wise Men really were, and only four of them are the same in all the lists given.

The four about whom we are sure are Bias of Priene, Pittakos of Mitylene, Thales of Miletus, and Solon of Athens, and three of these four were from places on the eastern Mediterranean. (See map of Asia Minor on opposite page.)

Even if we take the whole list of the seven as they are sometimes given, four of them were from Asia Minor or the Ægean Islands, and only three from Greece proper. Furthermore, Solon of Athens, the most important of those from Greece, appears to have greatly enjoyed traveling in the provinces of Asia Minor, for in regard to his journeys in the East we have many stories, both true and false.

One familiar story concerns his visit to Crœsus, the richest of the kings of Sardis. After his royal host had shown him all the glory of the court and the treasures of silver and gold, Solon was asked whom he considered the most fortunate man in the world, the expectation, of course, being that the Wise Man would name the great and powerful Crœsus as the most fortunate individual who had ever existed.

Solon, to the king's surprise, however, named certain obscure people who had done their duty and were loved by their neighbors and afterward died the death of simple but honored citizens.

A TALE DESTROYED BY HISTORICAL CRITICISM

The noble words of Solon had a great effect on Crœsus, and were remembered at the tragic moment when Cyrus was just about to burn him to death, and were the means of saving his life.

We all know this story, but, unfortunately, it can not be true, for Solon would have been too old and Crœsus too young for any time of meeting to have been possible; and so we must yield this delightful tale, with many others, to the destruction of historical criticism.

Another story which connects Solon with the East may be genuine, as far as its chronology is concerned. It is said that the great law giver, hearing his nephew singing one day, asked him who was the author of the song. The youth replied that it was one of Sappho's poems; and Solon was so much impressed with its beauty that he exclaimed, with admiration, "Let me not die before I have learned it."

PICTURING THE HOME LIFE OF ASIA MINOR 2,500 YEARS AGO

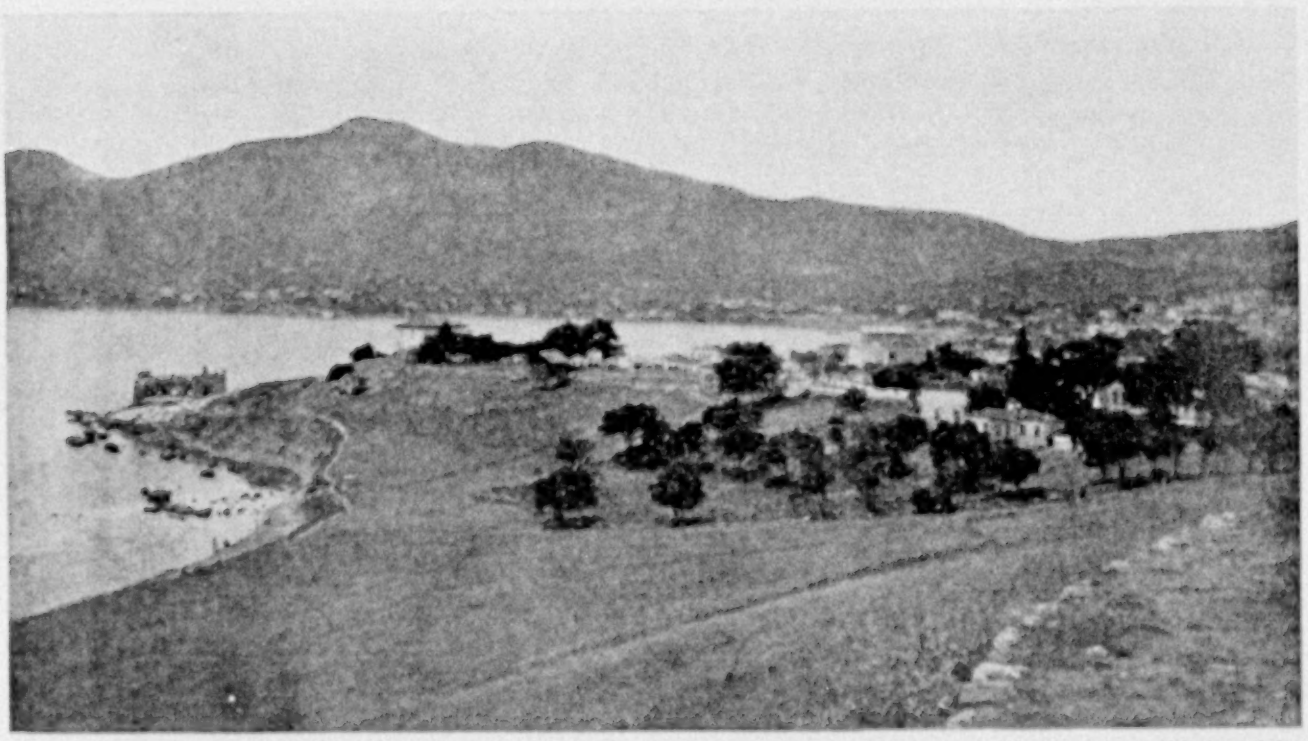
The centers of interest and activity among the Greeks at the time of the Seven Wise Men were in Asia Minor, and such familiar names as Samos, Chios, Miletus, Mitylene, Smyrna, and many others were connected with the great events that occupied the minds of the people in that era.

All who are familiar with the scenes of the eastern Mediterranean love them and enjoy reproducing the history of their past, reviving the descriptions of the busy life that came and went from one generation to another in those surroundings.

We may study with interest Asia Minor under the Roman occupation, at the time of St. Paul; or we may go farther back, to the period of the Kings of Pergamus; or we may try to picture the life of the eastern Mediterranean in the

ARRIVING AT AN ASIA MINOR MARKET-PLACE

Why it should be considered an insult to call a man a donkey cannot be understood by those who know life in the Near East, for the patient, sure-footed, dependable little beast of burden has as many virtues as he has duties. Though the ways in which they are employed differ greatly, the caravan master would feel as much at a loss without his donkey as would the Scotch shepherd without his collie.



Photographs from Mary Mills Patrick

THE CITY OF MITYLENE HAS GIVEN ITS NAME TO THE ISLAND WHICH WAS THE HOME OF SAPPHO

Lesbos, as the little island of Mitylene was called until the Middle Ages, was the home of the Æolian school of lyric poetry. Beauty and profligacy were the main attributes of the Lesbian women, but neither characterizes the present inhabitants.

GREEK PEASANTS DANCING ON THE HILLS NEAR EPHESUS

These lineal descendants of the Greeks of ancient days have retained much of the grace and appreciation of rhythm which distinguished the race in the time of the Seven Wise Men, when a knowledge of music and poetry was universal in Greece, the islands of the Ægean, and the Ionian colonies of Asia Minor.

Photographs by Cass Arthur Reed

DONKEY AND CAMEL BOY ARE THE PACE-SETTERS FOR THE NEAR EASTERN CARAVAN

The camel is too dull a creature to be without a leader, so the donkey leads the long line of patient beasts of burden. The paving here seen is exceptionally fine for Asia Minor, but when wet and slippery it offers an insecure footing.

XUM

RUINS AT LAODICEA, CITY OF ONE OF THE SEVEN CHURCHES OF THE APOCALYPSE

Ephesus, Smyrna, Pergamos, Thyatira, Sardis, Philadelphia, and Laodicea are well known to students of Revelation. The Laodiceans were lukewarm in their belief and were so self-satisfied in their material wealth that Paul censured them severely. This fine city, named for the wife of Antiochus II, suffered at the hands of Timur the Lame and was repeatedly damaged by earthquakes.

Photographs from Mary Mills Patrick

GUZELHISSAR, MEANING BEAUTIFUL TOWERS, IS THE TURKISH NAME FOR ANCIENT TRALLES, WHOSE RUINS ARE TO BE FOUND EIGHT MILES FROM THE BANKS OF THE MÆANDER RIVER

The town, which is found on English maps as Aidin, sits astride the Eudon, an affluent of the historic Mæander. The tanning of morocco leather and the export of cotton and figs are the chief industries, but to the epicure of Turkey the city is famous for its sweetmeats. Tralles was once the strongest fortress in the broad valley of the winding river from which we derive the word "meander."

even earlier period of the Seven Wise Men, which was from 650–550 B. C. It was a time of unique interest in history, for much of our present thought-life owes its origin to movements which began in the days of the Wise Men.

Can we put ourselves back in that far-away time and picture something of the homely, every-day life of the people? Can we find out how they thought and felt?

What we wish is not the historical facts about that age, nor the translation of the writings that have come down to us from it, but the human living, which was the *cause* of the history and of the literature,—something which books cannot give us—a comprehension of the throbbing, pulsing life that was strong and vivid enough to make itself felt, even to the present time.

THE CHARM OF ISLAND LIFE IN THE ÆGEAN

The outward surroundings we can reproduce, for they are still practically the same. The eastern Mediterranean is one of the gardens of the world. The sea is bluer than other seas; the tints of the skies are softer, the violet and rose blend more marvelously in the sunsets, the mountains have a sensuous attraction, and the sails on the horizon allure.

There is a wonderful charm also in the island life of the Ægean, and that charm must be in many ways the same at the present time as it was in the distant age of which we are speaking.

Other parts of the world have changed under the transforming power of modern enterprise, but the shores and islands of of the Ægean have thus far largely escaped the influence of modern business life. As yet, no sky-scrapers nor commercial storehouses, few railroads, automobiles, and electric trolleys mar the effect with their harsh lines and shrill sounds.

The calm and peace of country scenes have remained, and in their natural features we may still find the surroundings of the old life, for the environment of the new scenes gives us the probable setting of the old.

The shipping also has not wholly lost its ancient form. It is true that the picturesque warships, with their banks of oars each side, have disappeared; but the craft which lazily sail from one port to another today may well remind us of the descriptions of the old merchant vessels.

ALWAYS THE SEA FOR REFUGE

A great wave of colonization had passed over that part of the world just before the time of the Wise Men, and the colonies, after the struggle for existence of the early years in new surroundings, had emerged into a larger life. In finding larger life the sea always helped them; for, in political strife within and the need of protection from without, there was always the sea for refuge. People who can sail away from trouble at home always find resources, and the sea was the source of many treasures.

The growth of the colonies was rapid, for other reasons. How could it be otherwise in such beautiful and fruitful surroundings! As Herodotus says, "The Ionians built their cities under the finest sky and in the finest climate in the world, for neither the regions above nor below nor the parts to the East or West are at all equal to Ionia."

IONIA THE CENTER OF THE WORLD'S COMMERCIAL LIFE

People of the twentieth century look to England and the United States as among the countries where the comforts of living and opportunities of learning how to do things are very great, but men went to Ionia, in Asia Minor, for these advantages in the age of the Wise Men.

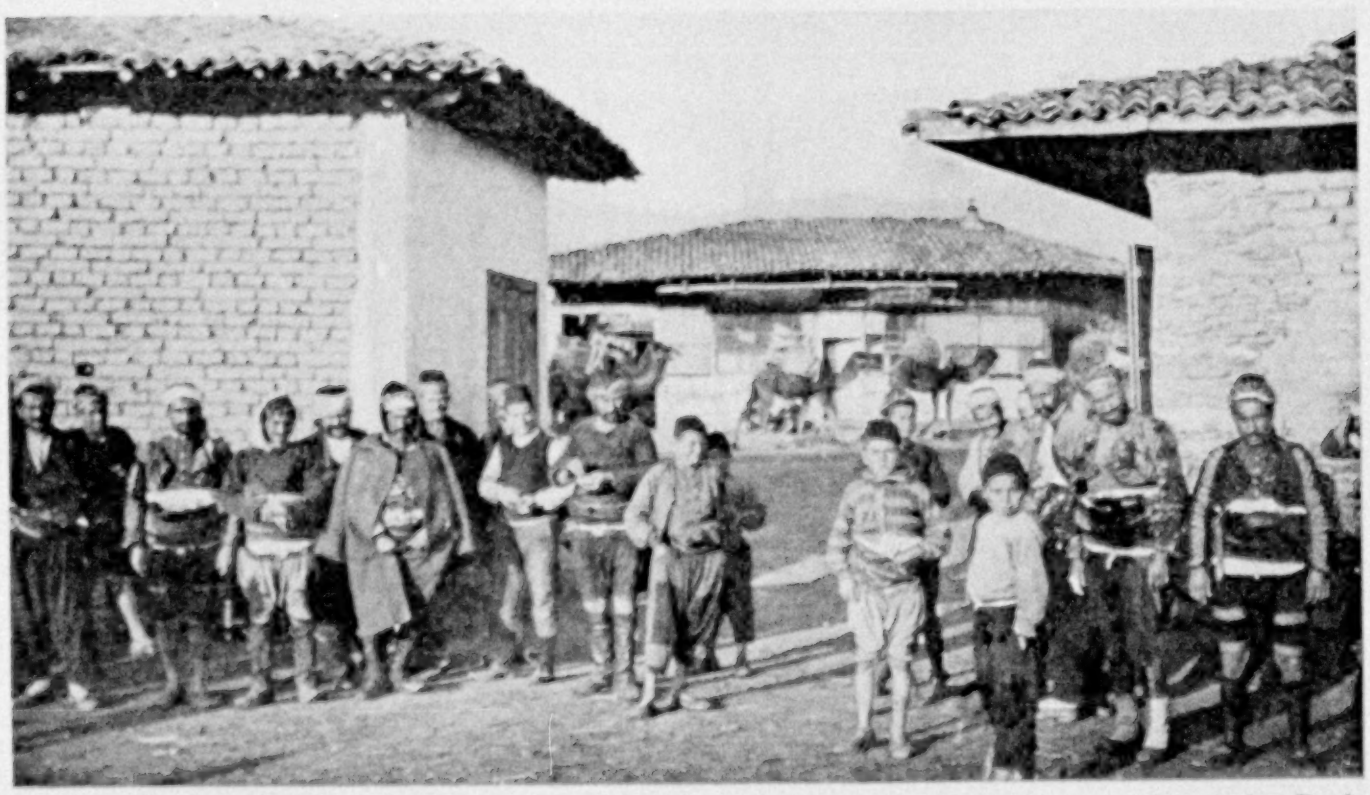
To be up to date at that time one had to live in Ionia, where life was luxurious. There, things were produced richly with little effort; grapes were abundant and the wine the best in the world, and ships laden with olives and wine and oil sailed to all ports of the Mediterranean—Egypt and Phœnicia, Italy and Northern Africa, and even as far west as Spain—bringing back the luxuries of other lands.

Long before Athens joined the circle of commercial cities, the riches of the entire eastern world were represented in Ionia. The market-place in both large and small towns was the central point and constituted a kind of bourse—in fact,

XUM

MOSLEM LOUNGERS IN FRONT OF A COFFEE-HOUSE IN AN ASIA MINOR TOWN

Since the Turks took possession of Asia Minor, in the fifteenth century, it has been known as Anatolia, a word derived from the Greek meaning "rising" or "East." It comprises the entire peninsula which forms the western extremity of Asia lying between the Black Sea on the north and the Mediterranean on the south. Its total area is about twice that of the State of Colorado.



Photographs by Cass Arthur Reed

BESDEGUMA, A VILLAGE IN THE AIDIN VILAYET OF ASIA MINOR, WHICH IS SELDOM VISITED BY STRANGERS

Even in remote districts the camera is recognized and the ordinary business of the town is suspended while the strutting braves "have their picture took." The coffee-house is the Turk's café and club, and even in the busy season muleteers and laborers take time to gossip and drink the thick black coffee which takes the place of alcoholic beverages.

Photograph from Mary Mills Patrick

MILKING A GOAT OUTSIDE A CUSTOMER'S HOUSE

A goat can thrive where cattle would starve and sheep would hunger. Europeans believe that goat milk, if used unboiled, will cause Malta fever, but the Asia Minor natives drink it fresh and warm.

was the Wall Street of the town—where the excitement of trade ran so high that a market-master was necessary to control it.

THE FIRST COINS

The question naturally arises: "How was business carried on, by barter or by some primitive kind of banking system?"

Our chief testimony on this point is furnished by the coins of the period, for coinage originated in Asia Minor, and as early as the time of the Wise Men coins were in common use. There are very few specimens of that age now in existence, yet some are preserved in the British Museum and in other collections.

The first coins were made of electrum, which is a mixture of gold and silver and which was found in natural form in the mountains of Lydia. There were no inscriptions on them, but emblems of religious worship and also of trade. The connection of the coins with religion may have been because everything in that time was associated with religion. Possibly the priests in the temples were the first to invent coins. On the other hand, the association may simply indicate that the two things about which the people cared most were religion and trade.

Of this type the coin of Cyzicus, on the Marmora, is well known. It bears the figure of a tunny fish decorated with a sacrificial fillet. The great trade of Cyzicus at that time was in tunny fish, which belongs to the mackerel family and is found in the Sea of Marmora. The fillet expressed the religious acknowledgment.

The coins were very primitive in appearance and irregular in shape, some round and some oblong, and all of them much thicker than coins of a later day.

HOW THE CULTURE OF A PAST AGE IS STUDIED

The age of the Wise Men was an age of a certain type of culture. There are two conditions necessary for culture: one is freedom, and the other is a fair degree of material comfort. As Homer says in the Odyssey:

Photograph by Ernest L. Harris

FOUR YOUNG ADALIANS AND THEIR PLAYMATE

Just as Smyrna is the center of Greek hopes for influence in Asia Minor, Adalia is the city where Italian ambitions find expression. Adalia is the most picturesque city on the southern coast of Anatolia and many of its buildings are richly ornamented. There is a small inner harbor and a larger outer harbor, both of which at one time could be closed with chains.

The heaven-taught poet and the enchanting
strain,
These are the products of a peaceful reign.

For some of the successful people of Ionia, pleasure consisted in the possession of objects of oriental luxury, in pomp and in the lazy idleness to which the Eastern climate always tempts us; but for those who cared to attain to higher things, the opportunity came in the spirit being free from sordid care and from the pressure of daily need, with leisure to think.

The culture of the age depended, however, not only upon economic causes, but also to a large degree upon the inspiration given by intercourse with other nations, bringing about exchange of ideas and increased knowledge.

The age of the Wise Men was before

the time of Greek history, and there are few records from which to reproduce it. In trying to describe the culture of an age wholly different from anything which we have ever known, the chief authority is from internal evidence of writings of the time, largely poetry, which now exist for the most part in fragments, quoted by later writers, and also from pictures or vases belonging to that period.

The pictorial representations on the vases of the stories of the gods reproduce the ordinary customs of daily life in regard to religious worship, dress, use of chariots and horses, weapons of war, varieties of musical instruments, habits of sitting and standing, wedding and funeral ceremonies, and many other things.

Are we justified in calling the period a cultured one?

It seems to me that we are justified in attributing culture to people who could produce and enjoy the best lyric poetry which the world has ever known, and who could originate lines of thinking that have had a permanent significance in the development of the intellectual life of later times.

Emerson says that the flower of civilization is the finished man, the man of sense, of grace, of accomplishment and social power, and of such there were many in that age.

We find in the late seventh and sixth centuries B. C. the beginning of modern systematic knowledge, and a careful study of the thought of the time will give us an insight into the origin of modern science and philosophy, for our present use of language and our ideas of the world are permeated with the results of that ancient thinking.

Even the emancipation from traditions and the desire for independent individual thought, which characterize modern ideals, find their counterparts in the age of the Wise Men.

ANCIENT CULTURE WAS ADDRESSED TO THE EARS

The culture that arose in Ionia was very different in its form, however, from any development of later times, and most difficult for us to understand.

It was, first of all, addressed to the ears and not to the eyes. We are now essentially an eye-minded people, and measure our learning by the books that we read and write and collect in libraries and by other things that we can see with our eyes, but the sixth century B. C. was an age without any free distribution of written records and only the beginnings of libraries, which were mostly collections of wooden tablets. Some of the great men of the latter part of the period each wrote a book, but it was a laborious process.

Heraclitus of Ephesus was one of those who wrote a book which was kept for safety in the Temple of Diana at Ephesus; for a book was not a thing to be lightly regarded, and the process of writing was so difficult that it was far easier to remember what one had written than to decipher it from the book.

Solon and Pittakos wrote their laws on wooden tablets. However, they did not write them for general circulation among their friends, but rather to preserve the laws that they had promulgated.

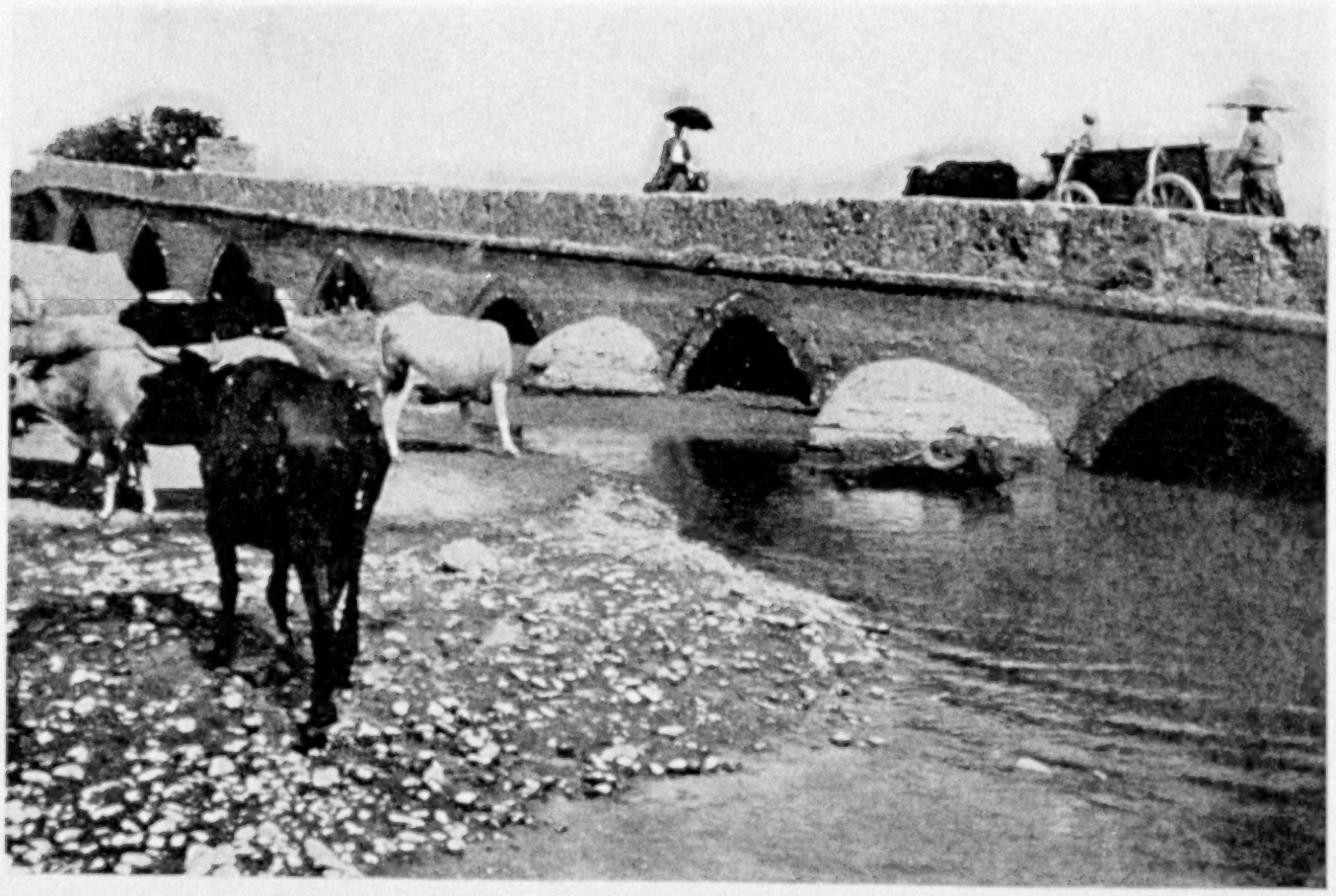
LABORIOUS TO WRITE, WRITING DIFFICULT TO READ

Greek writing at the time of the Wise Men was not easy to read, for neither the words nor the sentences were divided from each other, and the lines ran both from right to left and from left to right.

The length of time which archeologists, even when they are good Greek scholars, give to puzzling out inscriptions which belong to that period would not lead us to suppose that any writing of the time would form easy reading for an evening by the fireside or an afternoon siesta.

During the period of the Wise Men, however, writing was becoming more common, as it was in that age that we had the beginning of Greek prose; and while it is easy to conceive of poetry being communicated from one generation to another by constant repetition, it would not be the same with prose, at least in the case of prose that followed any consecutive train of thought.

There were certain forms of prose, however, in the age of the Wise Men that could be easily remembered, such as the so-called gnomic sayings, which were



Photograph from Mary Mills Patrick

AN OLD TURKISH BRIDGE NEAR BRUSA

The silting up of the river beds in the Near East shows the deplorable effects of deforestation.

Photograph by Cass Arthur Reed

THE CARRIAGE, THE CAMEL TRAIN, THE GREEK PRIEST SEATED SERENELY ASTRIDE A DIMINUTIVE DONKEY, AND THE PEDESTRIANS ARE ALL TYPICAL OF MODERN SMYRNA

This city, like six others of Greece, the Ægean archipelago, and Asia Minor, lays claim to the distinction of being Homer's birthplace. The poet was once worshiped here in a magnificent building known as the Homereum.

mostly proverbs, and also fables. Æsop and his fables belong to that era, although Æsop himself, who is one of our most precious literary heroes, is, I regret to say, tottering somewhat under the attacks of historical criticism.

HOW GREEK POETRY WAS PRESERVED

Culture was certainly not measured by book-learning, but every educated man or woman had to be ready with his lyre, when called upon after dinner, to accompany an improvisation, which might be good or bad, according to his ability. If he could not improvise, he repeated some of the wonderful poetry which was the inheritance of the age, for the highest expression of the culture of the time was in its poetry.

The older epic poetry and the lyric poetry of the era of the Wise Men would furnish the means of culture to any age. There was a freshness in the thought and delicacy in the use of words in the Greek lyrics different from anything found in later literature, and it is in the poetry that we find the real soul of the age. Many fragments of it have been preserved, not by any special effort at the time, but because it was a part of the life of the people and must live.

Greek lyrics were the result of many generations of poetical and musical expression, and they show the real creative work of the era and furnish us with the most subtle refinement of word pictures that the world has ever known.

Musical and poetical contests were common, in which the music and poetry were given together and depended on each other for the complete effect desired, and it is difficult to know which was the more important, the music or the poetry.

We are familiar in classic study with the names of many of the great lyric poets of that period, but they themselves were as frequently called musicians as poets. For instance, the poet Alkaios had the reputation of being one of the greatest musicians who had ever lived.

A profound moral and physical influence was attributed to music. Good music was considered to have the power to reform the character and to heal disease, and to interpret poetry and make it intelligible to the inner nature. The art of music was, therefore, one of the finest things in the education of that time. It was much simpler than the music of modern times and was entirely subordinate to the words sung or repeated.

The charm of the music of this age seems to have been partly in the extreme precision of rhythmic treatment and in a protracted dwelling of the voice on one syllable. When the words which the music accompanied were improvised, the improvising took place under definite rules, and the learning of these rules formed the most important part of the education of a poet.

To the reciting and the music there was also added a rhythmic motion of the body, so that the entire personality of the performer was absorbed in the attempt to express the thought of the poem. The music was constant though subordinate, and the whole performance produced effects of which the most melodious of modern poets could never dream.

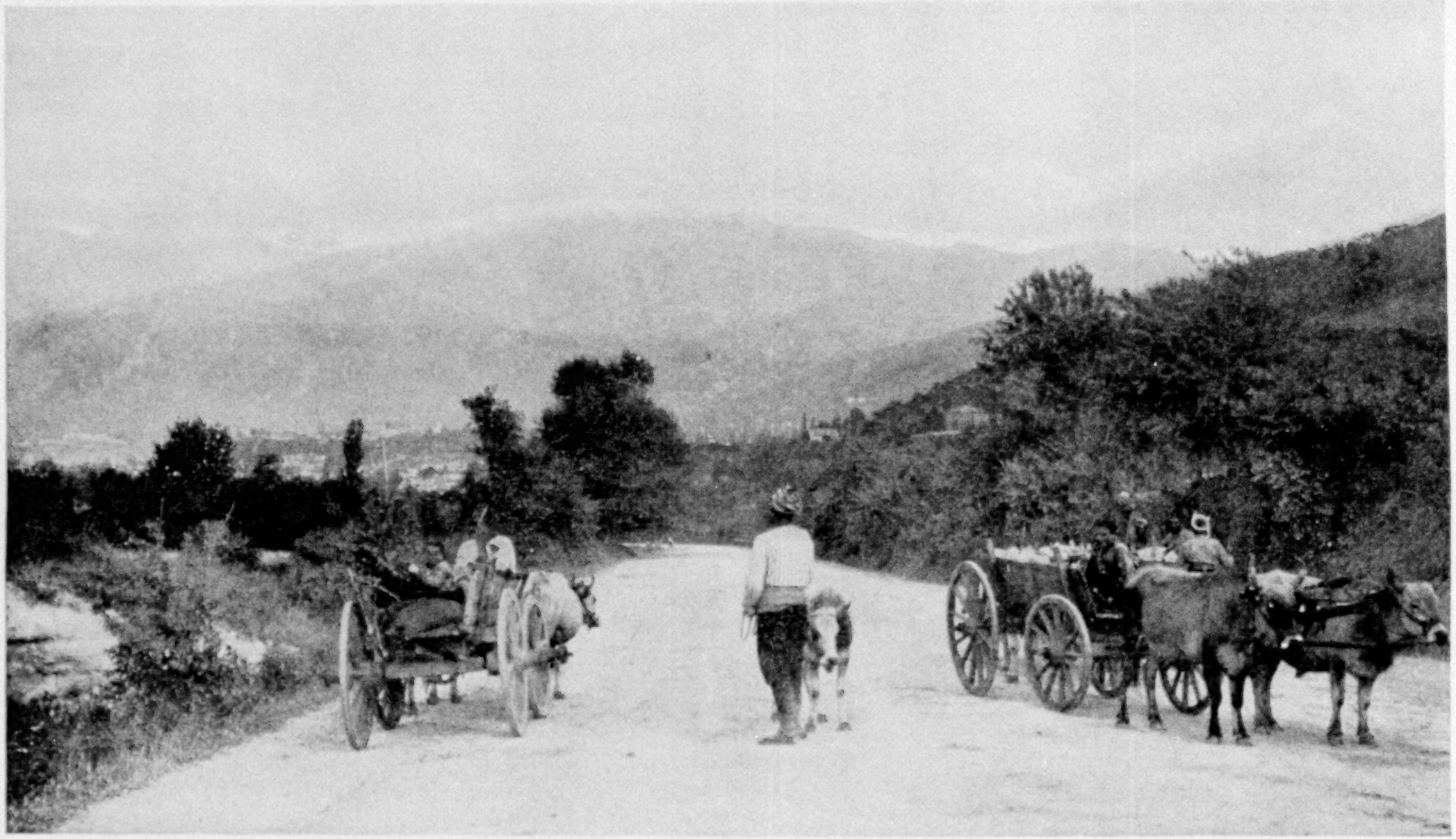
MANY MUSICAL INSTRUMENTS

There were many kinds of musical instruments, but the cithara and the lyre were the ones commonly used in accompanying poetry, while the flute was played by both men and women, in furnishing martial music to the soldiers in time of war. Musical bands marched to war with the soldiers and played on flutes, pipes, and harps.

For private use, the lyre and the harp were preferred, for it was thought that they did not prevent one from remaining master of himself—a free and thinking man or woman—while the flute, pipe, or clarinet put the man beside himself and obscured reason.

There is a story of a harpist which might belong to any age. He started a school in which to teach harp-playing. He had in his school nine statues of the nine muses and one of Apollo, but only two pupils. When some one asked him, however, how many pupils he had, he said: "Gods and all, twelve!"

There were extensive choirs, whose music was distinctly connected with the religious life of the people. These choirs were composed of both men and women



Photograph from Mary Mills Patrick

PEASANTS ON THEIR WAY TO BRUSA: IN THE BACKGROUND LOOMS ASIATIC MOUNT OLYMPUS

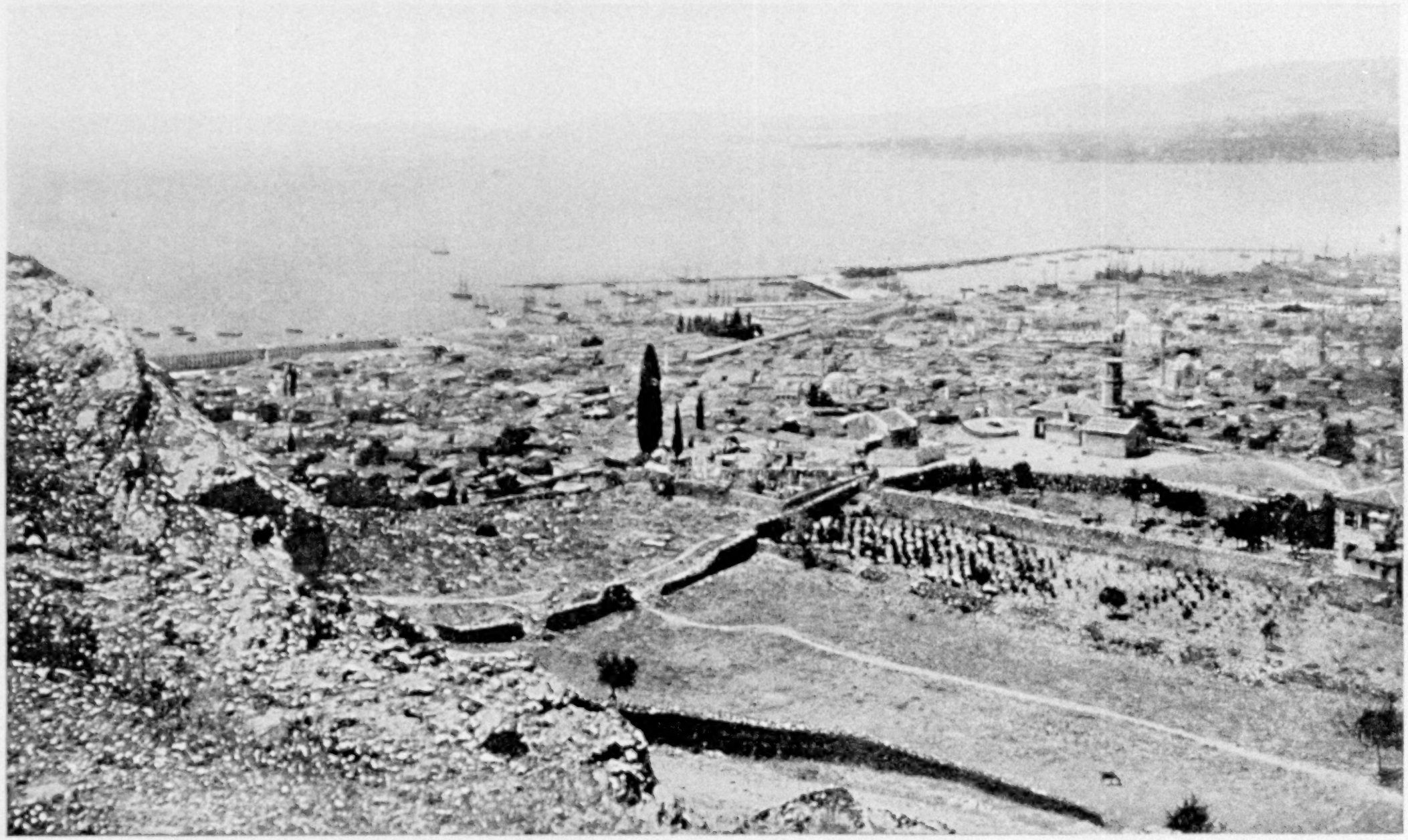
Brusa is the capital of a rich vilayet, which extends from the Sea of Marmora to Afiun-Karahissar, and has been suggested as the government center for the new Turkey. The entire Brusa district has great mineral wealth, immense forests, rich agricultural regions, and valuable industries. Brusa is connected with its port, Mudania, by a railway as well as a carriage road and is a city picturesquely situated, unusually clean, and of extraordinary historic interest.

XUM

Photograph from Mary Mills Patrick

AYASOULOUK, THE VILLAGE THAT STANDS WHERE PROUD EPHESUS ONCE RAISED ITS MARBLE BUILDINGS. THE POOL OF WATER IN THE RIGHT FOREGROUND COVERS THE SITE OF THE TEMPLE OF DIANA, ONE OF THE SEVEN WONDERS OF THE ANCIENT WORLD

"How are the mighty fallen!" is the favorite expression of the tourist to Anatolia. Hittite, Phrygian, Lydian—all once great—where are they now? Geography in Asia Minor has long waged war against permanency. There is no great navigable river carrying traders or soldiers into the interior. The central plateau has few approaches and a far different climate from the coastal plains. But the locomotive, the motor truck, and the airplane will soon open up Anatolia in a totally new way, binding it to the world commercially, politically, and geographically, as the historic bridge-land between East and West



Photograph from Mary Mills Patrick

A PANORAMA OF SMYRNA SHOWING POLYCARP'S TOMB (WHERE THE TALL CYPRESS NOW STANDS)

Polycarp was Bishop of Smyrna and one of the most illustrious of the early Christian martyrs. Upon being led into the theater to be burned to death, he was offered his freedom if he would "revile Christ." To this proposal he made the famous reply, "Eighty and six years have I served Him, and He hath done me no wrong. How can I then speak evil of my King, who hath saved me!"

and were employed for public and private religious festivals—to celebrate, perhaps, a victory, a death, a holy day, a birth, or a marriage. We are told that Alkman, who lived as early as 650 B. C., wrote a choir song for girls which was a dramatic part song.

RHAPSODISTS PRECEDED DRAMATISTS AND ACTORS

There was, however, no drama strictly speaking; the place which the drama subsequently occupied was filled by the rhapsodists. A rhapsodist was one who sang professionally or intoned to music the poems of his age and of earlier ages. For this purpose some part of the so-called Homeric poems was usually selected, an introduction and some closing words added, and it was presented to companies of people in private houses.

A professional rhapsodist would naturally choose the most popular parts of Homer; but if he were a man of some thought power, he might present his own compositions, although that would happen more rarely.

Whenever a banquet was given, the best rhapsodist to be procured was engaged, one who could recite not only Homeric poems, but those of Hesiod and Archilochus, not neglecting the lyric composers of his own time.

In this way the best of the world's poetry became a part of the familiar thinking of the common people, and it was surely a much easier and pleasanter way of learning than through studying from books. There were so many rhapsodists in the latter part of the period that they were organized into guilds and schools.

PREPARATIONS FOR A BANQUET

The room in the house which was used for entertaining was usually rather large, with an earthen floor, which was carefully swept before a feast was given. Before the guests arrived, the hosts and hostesses washed their hands and the goblets were all rinsed. In the center of the room stood an altar, which was covered with wreaths of flowers. The large wine bowl was filled to the brim.

The guests arrived wearing crowns of flowers, and the wine-cup, with wine and water, usually mixed half and half, was passed around, but not before libations were poured upon the ground for the gods.

There was very free use of many kinds of ointments and perfumes, some of which were very costly, made from all kinds of flowers. As a poet of the age writes:

> From the slender vase
> A willing youth presents to each in turn
> A sweet and costly perfume.

Honey and cheese were given the place of honor among the refreshments. The house resounded with music and song.

Now the rhapsodist enters, wearing his white robe and golden crown. There is a man or woman with him who also wears a crown and who sings or plays a low accompaniment to the poetry which the rhapsodist recites.

He begins, perhaps, with selections from Homer, whose poems always had first place in the literary life of the day, and then follow some of the lyric poems of Terpander and Archilochos, Sappho, and others. He naturally selects the poet that belongs to the place where the feast is given.

In Lesbos one would sing of Terpander, Alkaios, or Sappho, and in Paros of Archilochos, and in Smyrna or Chios of Homer.

WOMEN SHARED IN ALL CIVIC ACTIVITIES

Social life in Ionia and the islands was the life of men and women together, for women were free in that age to share in all the activities, even in public athletic exercises in the gymnasium of the town, as we read of their doing in the Island of Chios.

There were, to be sure, no suffragettes, for formal voting by citizens of any class was a thing of later times, but the life of all was free and open and natural, and the standards of morality were much higher than in subsequent periods of Greek history. It is to the corruption of later times that we owe the calumnies that injured the fame of Sappho, for the free life of the era of the Seven Wise Men was not appreciated by succeeding ages.

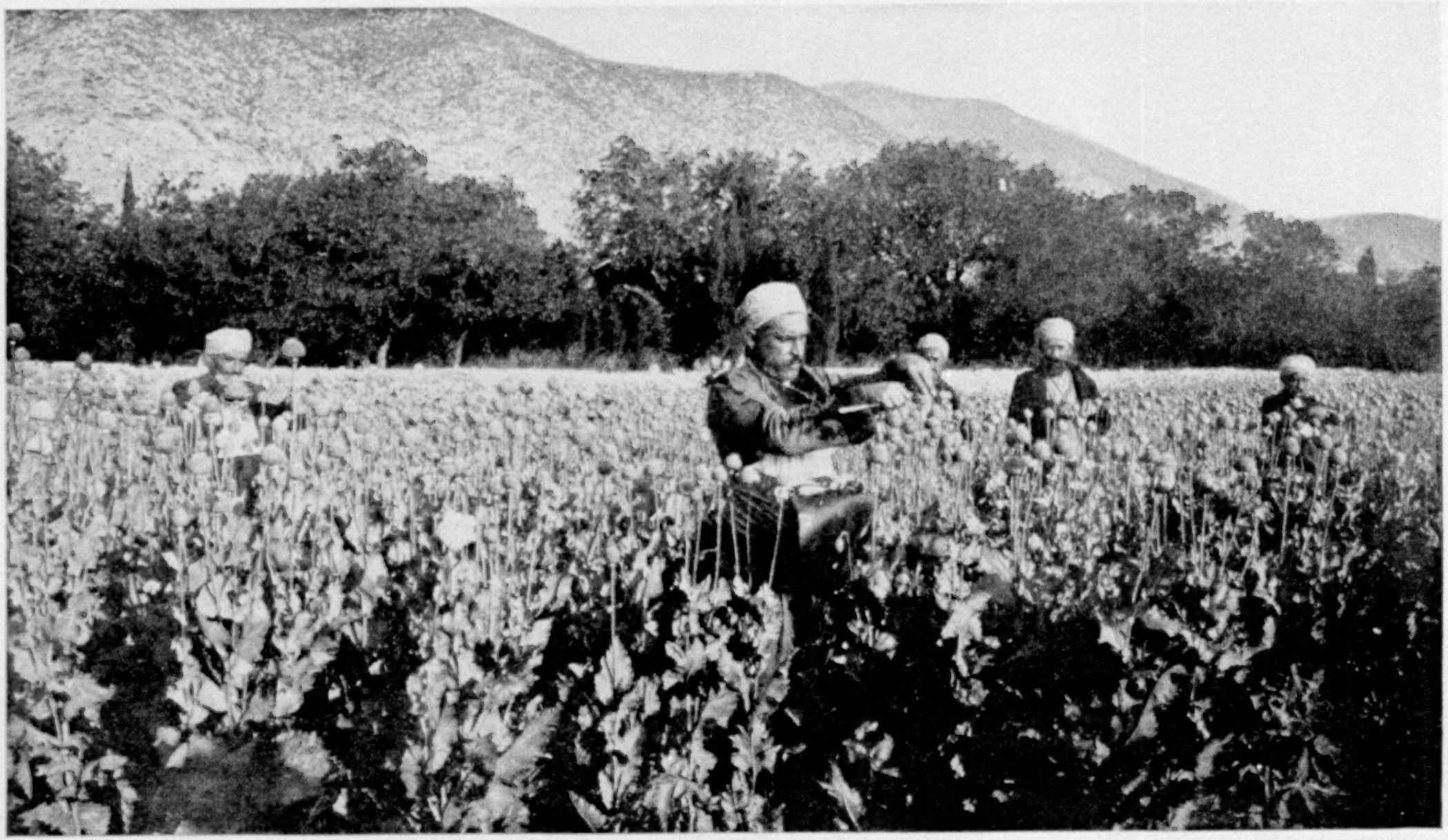
XUM

Photograph from Mary Mills Patrick

THE NAME OF THIS CITY OF ASIA MINOR IS MOST APPROPRIATE—AFIUN-KARAHISSAR, WHICH MEANS BLACK CASTLE OF OPIUM

Situated at the junction of railroad lines leading from Constantinople and Smyrna to Konieh, Afiun-Karahissar, with a population of 20,000 before the World War, has numerous mosques, baths, chapels, and inns, as well as manufactures of felt, carpets, arms, and saddlery; but its chief industry is its opium trade.

XUM



Photograph from Mary Mills Patrick

TURKISH PEASANTS GATHERING OPIUM IN THE POPPY FIELDS NEAR AFIUN-KARAHISSAR

The opium poppy is probably indigenous to southern Europe, but it has been introduced into many countries. The Moslems fostered its spread through India, and the Arabs carried it to China. The opium-gatherers in the illustration are scraping the capsule pods to collect the juice which oozes from the incisions made the previous afternoon. The flowers, which fade in a few hours, vary in color from white to a deep violet. The medicinal qualities of the opium poppy have been known since the days of ancient Greece. Theophrastus, the famous pupil of Plato and of Aristotle, wrote of its value.

Celebrations, whether public or private, to be sufficiently distinguished, demanded something new—a new poem, new music, new dance motions. Thus arose the professional schools of the time, where girls and women were taught to write poetry and music. The best known of these was the School of Sappho at Mitylene, although there were many others—two others even in Mitylene.

Sappho's school was in a house in the city, and young women came from all that part of the world to attend it. We know the name of one girl who came from Greece itself to join this school. They were taught the rules of poetry, and to compose music and poetry, for the life of the people called for new music and new poetry almost every day.

There was a great demand also for new hymns to the gods, as each town wished to surpass the others in its festivals, and each great victory in war or celebration of some local event depended for success on the poetry and music of the occasion.

In time of peace, wedding songs were constantly needed, as every bridegroom then, doubtless, as at the present time, considered his own bride the most beautiful of all living women, and desired to provide the newest and the best poetry for the nuptial ceremony. Thus it came about that the wedding songs written by Sappho were among the most beautiful of her poems.

These early schools for music and poetry, which provided for the artistic needs of the people, seem to have existed before any school of philosophy was known.

THE FIRST SCHOOL OF PHILOSOPHY

The first school of philosophy was established in Miletus by Thales, one of the Wise Men, and was quite a remarkable institution, exerting an influence for more than a century.

Thales seems to have given himself more entirely to this school than to any of his other undertakings. There is a legend that he never married, and when his mother pressed him to do so he said: "It is not yet time." After his youth was passed she again urged him to marry and he said: "It is no longer time."

Many of the subjects taught in his school, such as astronomy, geometry, and geography, show the influence of Egypt and Phœnicia; but the philosophy was probably an original product, for while some of the sciences were somewhat advanced, the philosophy was apparently a first attempt at an explanation of the origin of the world. It originated a movement which culminated more than a century later in the idealism of Plato.

We may perhaps understand something of the attitude of the common people toward Thales' School of Philosophy from the story of the old woman who laughed when the master fell backward into a ditch after gazing too long at the stars. The old woman not only laughed, but she is said to have called after him: "If you cannot see what is under your feet, how can you understand what is in heaven?"

GEOGRAPHY AND ASTRONOMY WERE THEN PRIMITIVE STUDIES

The geography and astronomy taught in this school were very primitive: The earth was flat; the sun circled around it horizontally, being concealed at night by high hills. One writer of the time describes the world in the following poetical way: "God makes a mantle, large and fair, and embroiders on it earth and ocean and ocean's dwellings."

It is probable that the schools of the eastern Mediterranean possessed an ancient form of charter which consecrated them to the purpose of learning and prevented interference in their activities by the city.

In their charter, some god was selected for the patron deity, and his statue would be the first thing seen on entering the school building or the grounds. Sacrifices were offered to this particular deity, and processions and banquets were made in his honor and holidays were given on his feast days. Frequently some of the goddesses or muses were selected, for one of the poets says: "Loud crying is not fitting in a house dedicated to the muses."

This form of charter was called a *thiasos*, and is fully described in later times in connection with the schools of Athens. The strongest reason for be-

Photograph by George M. Kyrpie

WATER-CARRYING HAS ITS COMPENSATIONS IN THE NEAR EAST, FOR IT FOSTERS SOCIAL INTERCOURSE AMONG THE WOMEN

At times thirty or forty women may be seen discussing for hours the news of the day at such a fountain.

Photograph by Cass Arthur Reed

THE GREAT MARBLE BLOCKS JUST OUTSIDE THE THEATER AT EPHESUS SHOW HOW SPLENDIDLY THE CITY WAS BUILT

At Ephesus the Phœnicians introduced the religious cult of their moon goddess, protectress of trade. The temple was defended by armed virgins, and when the Greeks under Androclus met the fierce resistance of these women warriors the world gained the legend of the Amazons. The supremacy of the heathen goddess was unchallenged until Paul preached the gospel which caused Demetrius, the idol-maker, to fear that his profession would be harmed by such doctrines.

lieving that the custom of the *thiasos* existed in such an early age is the subtlety and force with which religious thought penetrated all the life of the period.

There seems to have been a shrine at almost every turn of the mountain path and a religious ceremony for every act of daily life. There were spirits in every wood and stream and spring.

The people thought of their religion in connection with every event and always consulted the oracle whenever they undertook anything new. The oracle that they honored most was far away at Delphi, in Greece, and before going to war, or building a town, or forming an alliance, a messenger was sent there to ask advice of the oracle.

Delphi held the imagination as the place where the gods spoke to men, inspiring the priestesses with divine words. Yet I fancy that when feeling ran high the people did not always wait to send a messenger to Delphi, which would be a matter of several weeks at least. Probably they often acted without the authority of the oracle and then secured it afterward.

People visited Delphi, however, from all parts of the Grecian world to get advice, and the place became not only a kind of inspiration bureau, but also a bureau of information, for the priestesses saw and talked with people from many places and became very wise in the political affairs of their time and often were able to give extremely good advice.

Their influence was felt all through the Greek colonies, and one of them, Themistoclea, is said to have been the teacher of Pythagoras.

THE DELPHIC ORACLE AS A GREAT DEPOSITORY OF WEALTH

The oracle did not, however, send advice free of payment. Rich presents were expected in return, and Delphi became a kind of national banking-house for the cities of Ionia, with different treasuries to contain offerings from the different places. Gifts of every form and degree of value were sent there—iron spits on which to roast oxen used in the sacrifices; bowls of gold and silver, and all kinds of the choicest treasures of the richest cities.

When the sayings of the oracle failed to prove true, however, complaints were sometimes made, and the priestess would be obliged to justify herself. So it was usually found wiser to be rather noncommittal and to give commands that

could be carried out in more than one way; to send an inscrutable answer, that sounded deep and wise and would allow those who sent to consult the oracle the privilege of doing their own way.

Yet the power of the oracle was almost unlimited and controlled even the rights of kings in the most distant parts of the Grecian world.

There was, however, another side to the religious life of that time more difficult to understand. During the sixth century B. C. there arose a great wave of religious emotions, affecting every oracle and popular temple and influencing even some of the philosophical teaching. It seemed to appear first as an outburst of personal miracle-working in connection with the worship of Dionysus and was especially strong in Asia Minor.

It taught the purging of sin by sacrifice, the immortality and divinity of the soul, eternal reward to the pure, beyond the grave, and retribution to the impure, the pure being those initiated into these teachings. This was the religion of the common people and was closely connected with the Orphic mysteries which were practiced in secret, took the form of secret societies, and therefore are almost impossible to investigate.

THE BELIEF IN INCARNATION

Certain of these cults believed in the incarnation and suffering of Dionysus Zagreus. Zagreus was a god who was born again as a man, yet was a god, was received into heaven, and became the highest and, in a sense, the only god. An individual who worshiped Dionysus Zagreus could himself develop his potential divinity.

Dionysus was explained in the Orphic mysteries as the god within the spirit of worship, as inexplicable joy, as the personification of the spirit of ecstacy, and the impulse above reason that lifts man out of himself and gives him power and blessedness. These mysteries were in part dependent upon the singing and playing of sacred music.

In the time of the Wise Men many of the old temples were rising on the coast of Asia Minor. The Temple of Diana of Ephesus, one column of which is now in the British Museum, was begun.

There is also to be seen in the British Museum a lion of colossal size from Miletus, carved in marble, on which the name of Thales, the Wise Man, is inscribed.

Sculpture had been for some time an acknowledged art and figures were made of gold and silver as well as of marble. Iron also was sometimes used for ornaments, as soldering in iron was discovered in that age by a man in Chios.

The pottery was perhaps the most artistic product of the time, and the earliest known vase bearing a Greek inscription, now in the British Museum, was from one of the Ægean Islands. It is ascribed to the early part of the period of the Wise Men.

THE HALLS OF FAME AND HOSPITALITY

The social life was first of all religious, as the worship of the gods and goddesses involved many public and private ceremonies, but there was also public political life in various forms.

In every large city there was a prytaneum, where national heroes were honored and where public feasts were given. Among the cupbearers who served the wine were sons of most noble families. One of Sappho's brothers was a cupbearer in the prytaneum in Mitylene. The prytaneum was the state hearth, where the sacred fire was ever burning, and there was the center of the life of the whole city and of the colonies sent out from that city.

Of the details of the lives of the Wise Men we know very little, and the stories told about them are probably mythical. Bias of Priene is sometimes placed at their head, but Thales and Solon are the best known. Pittakos was a wise reformer and king in Mitylene, and there is one figure of his head in existence which is found in the *Bibliotheque Nationale*, in Paris, on a coin of later date from Mitylene.

The life of each one of them was doubtless thrilling with interest, but the utmost that we can do to revive their activities is to associate the few events that are known with the places which were the theater of their actions and which are also a part of our own surroundings.

XUM

A SUMATRAN FREIGHT TRAIN ENTERING THE HIGHLANDS: IN THE BACKGROUND LOOMS SIBAJAK, ONE OF THE NUMEROUS VOLCANOES OF THE ISLAND

Good roads are almost unknown in the central regions of Sumatra, but along both the east and west coasts there are to be found highways such as this, and motor cars no longer arouse the curiosity of the Sumatran natives. There are only about 200 miles of railway in the island.

BY MOTOR THROUGH THE EAST COAST AND BATAK HIGHLANDS OF SUMATRA

By Melvin A. Hall

With Photographs by the Author

A FEW low islands, eventually to be gathered to the shores of the immense mother-island by steadily encroaching alluvial deposit, appeared and dropped from sight in the sultry haze of mid-afternoon as we steamed up the Straits of Malacca. Sumatra itself was never visible, although on the other side of the Straits, to the northeast, the palm-fringed Malayan coast and blue dorsal range of the interior remained all day in view.

But the Sumatran east coast is so low and flat that its long, dark-green outline can seldom be distinguished above the black water before the ship actually approaches its harbor.

It is a swampy, unhealthy coast, formed by the deposits of silt washed down from the mountains in the periodic inundations of an enormous annual rainfall. In this way the whole of the broad plain between mountains and sea, which, behind its mangrove fringe, forms the splendidly rich lands of rubber and tobacco estates, has gradually been built up and is steadily being extended.

The mangrove plays a considerable part in this extension because of its remarkable powers of reproduction. Growing partly in the shallow water of the littoral, these trees spread out a labyrinth of surface roots that act as a framework for the accumulating mud, which in the course of time rises above the surface and forms land.

CURIOUS SIGHTS ON THE RIVER

The ripe seeds of the mangrove do not fall off, but germinate upon the parent tree, growing downward in long, straight shoots. Eventually these drop from their own weight, and, falling upright in the shoal water, sink to the muddy bottom and there take root. Many fall beyond the outer edge of the swamp, and as the process continues more land is formed and the coast-line is gradually pushed farther out into the sea.

The morning after leaving Singapore we sighted the thin, dark line of the shore as the ship steamed in between the closely set bamboo-and-string nets of the Malay coast fishermen. Then the water became the color of pea soup from the river-brought silt of volcanic mountains, and shortly after the first glimpse of Sumatra we crept into Kuala Belawan, one of the mouths of the Deli River, the screw churning up the dirty yellow mud into a frothy trail.

The shallow water and shifting mud-banks of the coast make the location of ports unreliable and frequently necessitate their removal or abandonment after they have once been established.

Although large steamers now dock in the port of Deli, like most other Sumatran ports it is but a broad, mud-colored stream, winding sluggishly through dense equatorial swamps.

The ship ploughed over the bar into the midst of scenery typical of low rivers near the line. Dripping mangroves, with black, snake-like roots, shut in the river's edge, only here and there grudgingly yielding a little space to tiny coconut groves where palm-thatched huts roosted high on piles above the oily water.

A few sampans and narrow dug-out canoes idled along the banks, the fierce rays of the sun reflected from the ripples in their wake and glistening on the bare brown backs of their oarsmen.

Farther up-river a line of high-sterned *praus* from Borneo, gayly colored and carved, regarded the steamer with mistrustful, painted eyes. Their cargoes of Bandjermasin matting for tobacco bales, and *anak kajoe* (poles for tobacco drying), and *atap* for thatching roofs lay piled high around their curious masts,

DRIVING THROUGH A TEAK FOREST NEAR MEDAN, AN IMPORTANT SEAPORT ON THE NORTHEAST COAST OF SUMATRA

Of all the timbers of the world, teak is the most valuable. Its durability is remarkable, rafters in some of the temples of India having served their purpose for more than a thousand years. It is used for shipbuilding and interior paneling and in the manufacture of furniture. It can be easily worked and is susceptible of a high polish. When properly seasoned, it neither cracks, shrinks, nor alters its shape. The teak is not one of the giants of the jungle, however, for it seldom attains a height greater than 150 feet.

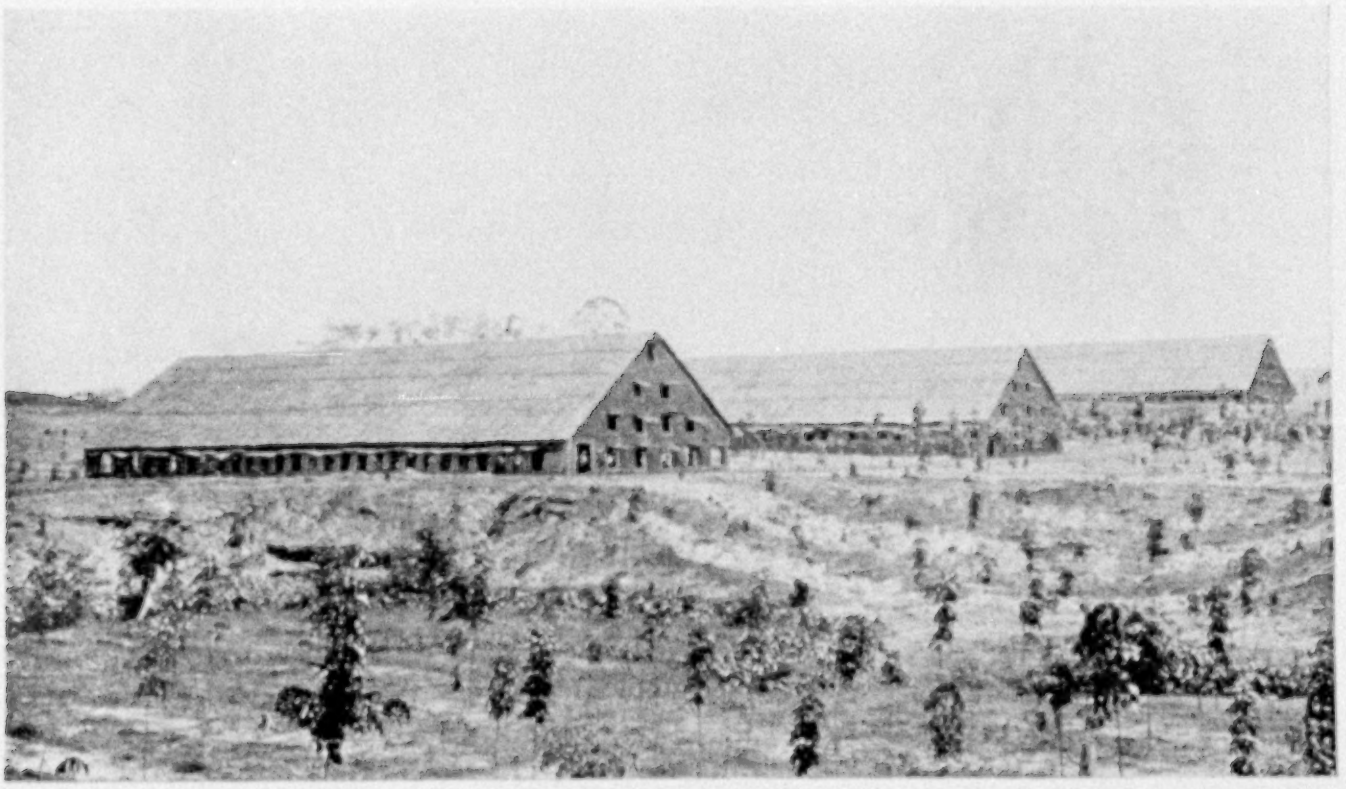
one rising upright amidships, the other with a weird forward rake near the sharp-pointed bow. Beyond, the steamer rounded a bend in the river and tied up to the dock, where groups of men in immaculate white suits and white topees awaited its arrival.

LANDING LABOR FOR SUMATRA

While waiting to supervise the unloading of my automobile, I watched all the fourth-class passengers as they were counted, checked off, and landed.

The latter process, however, was so interesting that I did not begrudge the time it required.

All the deck space not reserved for first-cabin passengers was packed with coolies from Batavia and littered with their effects. A considerable number of them had camped in, on, and under my motor—chattering, smoking, combing



DRYING-SHEDS FOR CURING THE FAMOUS SUMATRAN TOBACCO

These atap-thatched buildings are no longer used for tobacco, however, for this plain has been given over to rubber trees, which are being extensively planted nowadays.

each other's hair, tending their babies, and munching little packages of strange food folded up in plantain leaves.

They were contract coolies on their way to labor on the tobacco and rubber estates of Deli and were chiefly Javanese, though a few Bandjarese from Borneo, Klings of southern Indian origin, Malays, and other nationalities appeared among them.

SUMATRA IS THIRTEEN TIMES THE SIZE OF HOLLAND

Sumatra is an immense island, nearly four times the size of Java and thirteen times larger than Holland itself, but its war-decimated population amounts to less than 3,200,000, most of which, for various reasons, is not available for labor. Because of this the island is barely beginning to attract attention, although more favorably situated than Java and richer in natural resources.

"Java is a country of magnificent realization, Sumatra one of great future." In the development of that future practically all the labor has to be imported on short-term contracts. Chiefly it is Chinese, which is expensive; Kling, which is viewed with disfavor by the British Indian Government, or Javanese, which is unwilling to come and does not thrive in the climate.

The tribulations of a labor contractor from the time of collecting his gang to their final safe delivery in Sumatra are legion and, to one disinterested, very amusing.

The Javanese is tractable and physically a fair laborer, but neither very ambitious nor reliable. He likes his feast days, his rice harvesting, his little comforts and luxuries, and is not eager to forego them for the uncertain inducements of foreign lands. But his mind is receptive, and the clever contractor, fortifying it with well-chosen stories of fortunes easily made, belittling the coolie's fears and objections, is often able to secure his contract by the timely offer of a new *sarong* (the chief article of dress worn in the Malay Archipelago) and perhaps a month's wages in advance.

But here the contractor's troubles begin. Unless carefully guarded, the coolie's enthusiasm is very apt to wane, and the moment for departure arrives with

A LITTLE GOSSIP NOW AND THEN IS RELISHED EVEN BY PRIMITIVE WOMEN: AT A KARO-BATAK MARKET

coolie, new *sarong*, and month's wages unaccounted for.

LURING THE JAVANESE COOLIE FROM THE CONTRACTOR

Even when safely gathered on board ship and the coast of Java has been sunk, there remains still to be cleared the intervening port of Singapore. There, in disguise, wily touts for the Malayan coolie brokers smuggle themselves aboard, no matter how vigilant the ship's officers may be, for labor is everywhere in demand. With much astuteness they proceed to poison the minds of the already-frightened Sumatra-bound Javanese.

"*Sumatra?* A country of tigers and ferocious savages who eat nothing but coolies; a cold land, where there is no sun, no rice; where laborers are unpaid, cruelly treated, and whence they rarely return!"

So the tout whispers on, adding terror to their own premonitions, refuting all that the contractor had said, and in the end offering to aid in their immediate escape from the horrible fate in store, to the tempting security of fortune and happiness in the Malay States.

Strict watch is kept over the ship while in Singapore, but scarcely a trip is taken that a few of those under contract are not among the missing when the final count is made. For every one lost the first mate is personally fined, I think about fifty gulden; but if he brings a certain percentage safely to their destination he receives a liberal bonus. Consequently the final checking off is fraught with deep anxiety for all concerned.

STRIKING COLOR EFFECTS IN WOMEN'S ADORNMENTS

Single file, as I watched, the ship-load of coolies passed before me and down the gangway between two officers and a contractor's agent, who checked them as they went—men, women, boys, and girls, with folded mats under their arms and their possessions tied up in long cloths slung around their necks and resting on their hips. Only those with babies were kept apart and counted last, lest one tiny head should be overlooked.

THESE FEMALE PORTERS ARE NOT AS HEAVILY BURDENED AS THEY APPEAR TO BE; THEIR HEAD PACKS CONSIST OF FINE MATTING

They were a picturesque lot in their gay-colored clothes. Most of the women were bareheaded, their black hair brushed back and knotted behind, with strings of coral beads hanging around their necks and big buttons of gold and silver, jade, amber, or ebony extending their pierced ear-lobes. Brilliant scarves half-concealed their fresh white corsages, and leather belts with massive silver buckles encircled *sarongs* of many hues.

Around the heads of nearly all the men were twisted the universal brown kerchiefs of Java flaunting starched corners; and, in addition to their *sarongs* and a few short coats and pajama tops, there was a noticeable partiality for white undershirts and long pink drawers.

Following the others came a tall Punjabi Mohammedan with a long gray beard. His dignified bearing and the striking eyes of the Indian Mussulman, which looked straight out from under an enormous turban, marked him at once as a very different type from his casual Malay brethren.

Two hours more elapsed before the next landing party, ourselves and the car, finally left the ship. The dock was many feet below the deck and the spaces in which the car had to be turned were all shorter than its length.

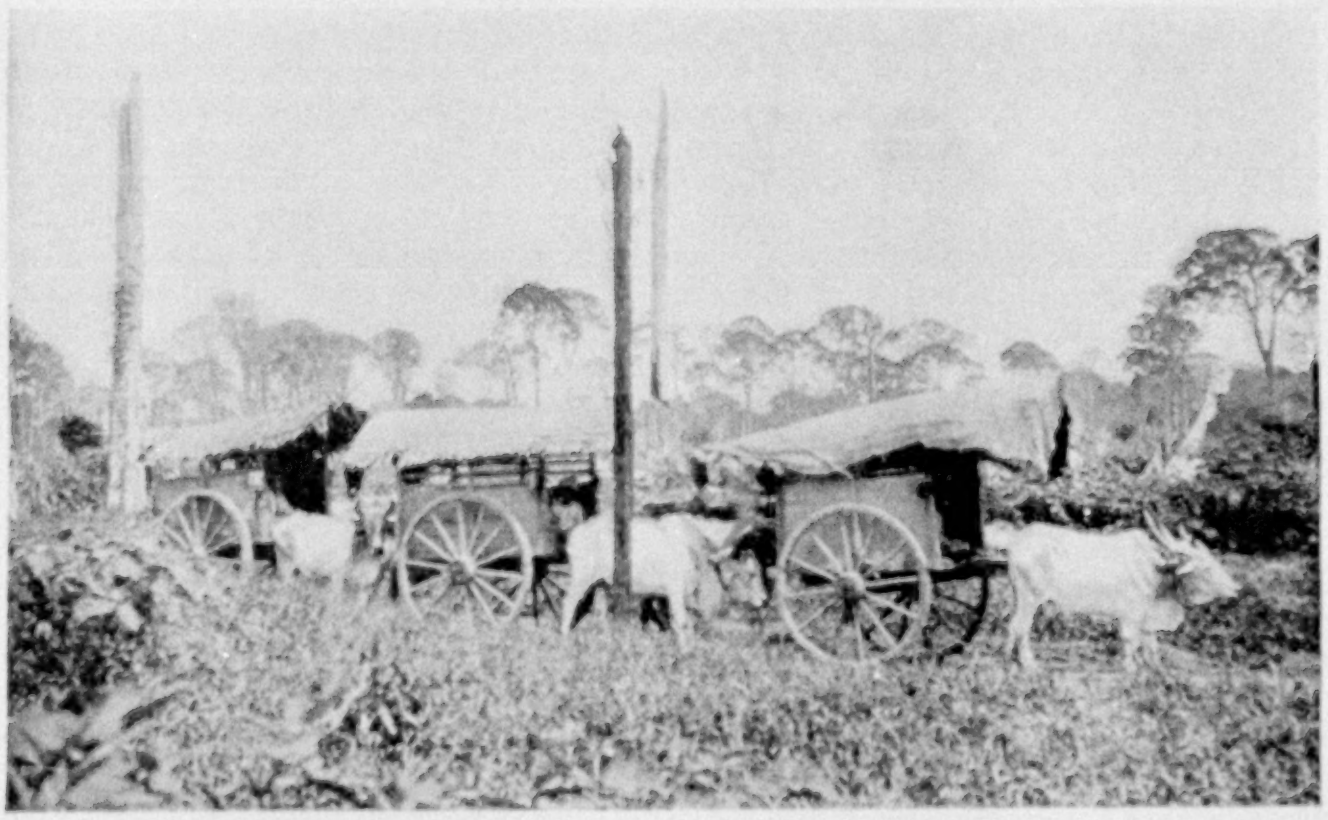
A mathematician might have amused himself by figuring out the possible combinations in which that car could have been jammed—I am sure we missed none—and when finally it was disentangled from the forest of stanchions, railings, projecting corners, and other checks to its progress, the crew and I breathed deep sighs of relief.

But as Belawan is isolated in the mangrove swamps, except for the long new bridge of the Deli Railway, one further struggle was necessary before the motor was really "landed" in Sumatra, and we toilsomely manipulated it onto an undersized railway truck. Then I relaxed into a seat and made faces back at the silver-gray monkeys which derided me from the trees, as the train took us up to Medan, fourteen miles inland.

The capital of the Government of the East Coast of Sumatra and headquarters

EVEN THE CARTS IN SUMATRA ARE THATCH-ROOFED

Central Africa has not a greater variety of animal life than Sumatra. Elephants, tigers, myriad apes and monkeys, two-horned rhinoceroses, and the most gorgeous butterflies in the world are to be found in the magnificent jungles of the island. The plant life is amazing in its luxuriance. Some varieties of bamboo shoot up like giant stalks of asparagus, at the rate of a foot or more a day, and in three or four months are waving their fronded tops above centuries-old monarchs of the forest.



PRIMITIVE TRANSPORTATION AND MODERN COMMUNICATION SIDE BY SIDE IN SUMATRA. NOTE THE TELEPHONE WIRES

of the Amsterdam-Deli Company, the most important tobacco company of the Indies, is a modern town, created by the Dutch and laid out in a very attractive manner.

MEDAN A CITY OF MANY MIXED RACES

There is an airy appearance and a cheerful, "white-man's" atmosphere about the official buildings around its spacious square and the cool, shaded streets of its European quarter.

The white bungalows are extremely attractive in their green and well-kept grounds, shaded by tall royal palms, rubber trees, bamboo, banyans, "flames of the forest," travelers' trees, and other tropical growth.

The huge buildings of the Deli Company, with a European hospital and a well-appointed asylum for native immigrants, are almost hidden in the dense verdure of a park filled with beautiful shade trees.

Farther out are the native compounds and various Asiatic quarters, having each its own characteristics.

The Chinese compound, with its elaborate temple, bears the unmistakable mark of the Celestial Republic, with adaptations to East Indian conditions. Its houses, joined together in even-fronted rows, faced with cement or white and tinted plaster, with carved and colored decorations and roofs flaring slightly upward at the corners, are much the same as are found in Malayan towns. Many of the stores and a large part of the trade of Medan are in the hands of Chinese, who, as usual, are extremely prosperous.

Medan's prosperity and importance are due to its location in the center of the rich tobacco lands; and owing to this, with the consequent demand for labor and to the scarcity of native Sumatrese, its population of about 14,000 is a very mixed one.

THE "BIG DAY," SUBSTITUTE FOR SUNDAY

We had arrived in the midst of *hari-bazar* and so were immediately introduced to this interesting feature of Sumatran life.

The tobacco, rubber, and various other estates of the east coast are spread over such a vast amount of territory, with so comparatively small a number of white men in their administration, that the Dutch planters and managers outside of the head office and shipping ports are apt to be more or less isolated from the society of their own kind. Since it is quite without significance to the Asiatic laborers, Sunday is not recognized as a holiday on the estates, but in its place a substitute has been instituted in the fortnightly *hari-bazar*, occurring about the first and fifteenth of each month and literally meaning "big day" or "holiday." Both are pertinent.

On these days all the planters—the general term for white men in any capacity on an estate, either their own or a company's—who are able to do so, flock in from their estates to the towns, those within reach of Medan naturally seeking the capital.

Very few are free to celebrate every *hari-bazar*, and when they do come into town, usually arriving the night before the "big day" with weeks of silence and loneliness to make up for, they waste very little of their time in sleep. Neither does any one else whose room happens to be in the vicinity of their gathering places.

The club and hotels are filled, as they were the night we arrived, with ruddy, healthy-looking Dutchmen in fresh white suits, sitting around big tables in unremitting conversation, while vast quantities of gin and bitters and other beverages are consumed, but with very little effect on these hardy men of the open air.

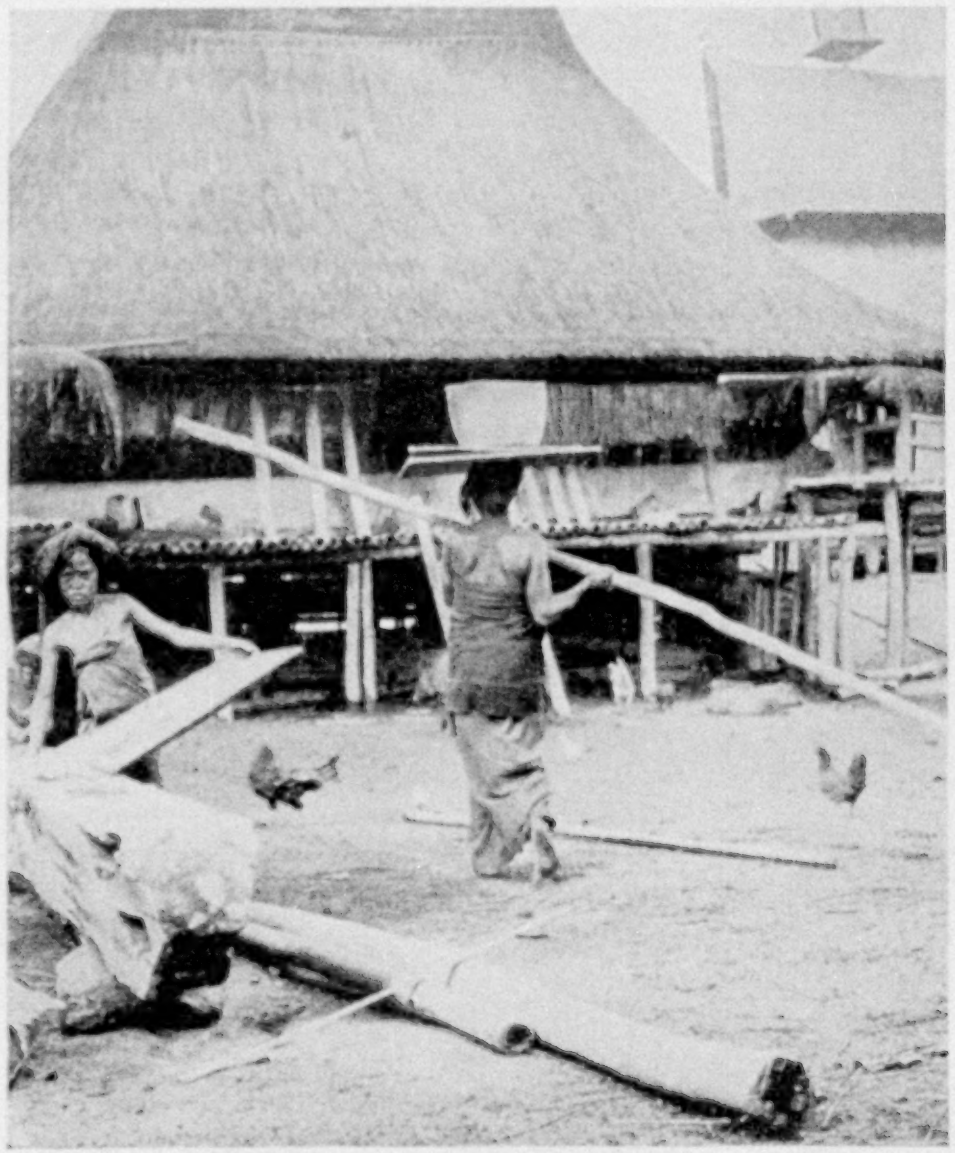
COMFORT AND PRIVACY IN A MEDAN HOTEL

Among its other advantages, Medan possesses one of the best hotels in the Netherlands Indies. The Hotel de Boer is built upon the plan largely used throughout Farther India—the dining-room, café, office, and kitchen by themselves in one single-story building, open on all sides to the air and shaded by large covered verandas and splendid big trees. Around this, forming three sides of a square separated by a driveway from the central building, the bed-rooms occupy the entire depth of a second single-story structure.

THE SKY-LINE OF THE SUMATRAN VILLAGE OF KEBON DJAHE IS ALMOST AS PICTURESQUE, IF NOT QUITE SO IMPRESSIVE, AS THAT OF GOTHAM

The Sumatrans are a well-to-do, even wealthy, race and build houses of unusual architectural design. Many of them are constructed of teak and bamboo. The carving and paneling reveal a bizarre taste. Note the elaborate pergola-like structure in the center of the courtyard; this is a pigeon-house (see text, page 90).

XUM



BLUE-CLAD FIGURES MOVING ABOUT A VILLAGE INCLOSURE IN SUMATRA

That greatest of medieval travelers, Marco Polo, is said to have visited Sumatra toward the end of the thirteenth century, but our first definite knowledge of the island was derived from the Portuguese, who landed on its shores sixteen years after the discovery of America. These rediscoverers were supplanted in turn by the Dutch and the English. The English retired in favor of the Dutch a hundred years ago.

THIS YOUNG SUMATRAN MATRON IS ALL DRESSED UP IN HER SILVER EARRINGS

Much significance attaches to the wearing of earrings in the island. Young girls wear them or not, as they choose. Upon marriage the bride must wear the big silver buttons, much after the fashion of our wedding rings. After the birth of the first child or when five years have elapsed, she must remove them. The sagging, buttonless ears of the old women are among their ugliest features.

EVERY DWELLING IN SUMATRA IS ITS OWN BARNYARD

Contrary to the custom, the floor of this porch is made of whole bamboo poles rather than the split pieces. The floors of most of the houses sag in the middle. The roofs are of thatch, made of the leaves of the atap palm.

Each room has its own covered veranda in front, cool and shady and screened from view, and its own bath in the rear. The comfort and privacy of this style of construction is unequaled for warm climates.

With the aid of the proprietor of the hotel, I procured a servant, a Malay-speaking Kling, to take with us into the interior. Kling is the term used in Malay countries for Tamils and occasionally for other races of Southern India who come to these countries as settlers or for trade. (All other continental Indians are called Bengalis.) Joseph was a Tamil, a Catholic from French Pondicherry, and a very good servant.

THE WHITE MAN'S ADVENT RESISTED WITH FANATICAL COURAGE

The whole of Sumatra has presented a very different problem to Dutch colonization from the organization of Java, with ten times its population. The inhabitants of the larger island, though few in numbers, have resisted foreign interference with the most stubborn and fanatical courage. Each one of its numerous tribes and principalities has had to be subdued in turn, a long and difficult process, as there was none of the almost docile submission of the Javanese.

Sumatra is immense in area and between its different sections there is little inland communication, that which exists being of a treacherous and warlike character. Much of the island remains unexplored; other parts, as the whole of Achin, in the north, are still in a state of protracted warfare, which seems destined to end only with the eventual extermination of the resisting tribes.

The Achinese war alone has cost over 200,000 lives and been an expense to Holland of $200,000,000. The first hostilities date back to 1599, but for the last forty years fighting has been continuous, a guerrilla warfare of surprises and ambushes in the jungles, in which the determined resistance of the Achinese continues undiscouraged, although their government has been deposed and all their towns and strategic positions occupied by Dutch troops.

Leaving the capital, our road at first led through some miles of country dense and green with vegetation, with tiny thatched native huts making picturesque brown spots in the midst of fruit trees and coco palms. As we approached nearer to the hills, this gave way to open plains covered with high grass and low bushes, the characteristic tobacco land of Deli.

THROUGH THE FAMOUS TOBACCO LANDS

The larger estates, especially those of the Deli Company, are divided into sections under the administration of assistant managers. Each year only one-tenth to a fifth of their enormous area is under cultivation, since to maintain the high quality of the tobacco grown the land is left fallow for from five to ten years after each crop. During the first year the natives are permitted to grow rice upon the fallow fields; then the soil is left to itself and to the bushes and rank grass which soon cover it.

The tobacco crop is a rich one, but the demands it makes upon the land and upon labor are such that it is not surprising to find the newer estates annually devoting more and more of their attention and territories to rubber and other less exacting products.

Gradually ascending in altitude, we passed through many miles of these monotonous, fallow-lying plains, their desolate appearance only increased by an occasional row of unused drying-sheds and a few fire-blackened trunks of huge *toealang* trees, solitary survivors of the primeval forest.

The sections actually in cultivation, however, were extremely interesting, with many acres of magnificent tobacco plants growing to a height of five or six feet in closely planted parallel ridges. Frequently they hedged the road on both sides and extended in unbroken rows as far as the eye could follow over the rolling fields.

EACH RACE TO ITS OWN TASK

The work of the plantation is many-sided and the various nationalities employed are usually engaged in their own distinctive branches of labor. Thus, although sometimes replaced by other races, Chinese predominate in the actual work on the tobacco plants; the bullock-cart

AN ELABORATE PIGEON-HOUSE IN THE VILLAGE OF KEBON DJAHE

Sumatra has an area exceeding the combined areas of the New England States, New York, and Pennsylvania. If it were superimposed on this continent, it would extend from St. Louis to Boston.

drivers are Klings; the carpenters are Boyans; the Javanese are woodmen, road-builders, and gardeners; and the Bataks and Sumatra Malays, who are not obtainable in large numbers nor reliable for sustained labor, clear the land preparatory to planting, and build roads and sheds.

The ubiquitous Sikh is often found in his favorite capacity of guard or policeman.

At the time of our trip the tobacco plants were half to three-quarters grown and the drying-sheds were being prepared to receive them. Upon some of the more advanced estates the lower leaves of the plants had already been picked and were hanging in the sheds, threaded on long strings and labeled, while wood fires smouldered at intervals on the ground.

Lines of two-wheeled bullock carts with loose roofs of thatched palm leaves, matting, or even sheet tin, rumbled slowly up and down the roads, hauling supplies and material for the estates. Many of the slow-plodding Indian oxen were magnificent big Guzerat animals, with large humps and long silky dewlaps, and, with their red-turbaned Tamil drivers sitting on the floor of the open-fronted carts, were strongly reminiscent of the tea plantations of Ceylon.

THE HIGHWAYS OF SUMATRA

The road was very good, wide, well made, and much better than I had expected. There is practically no rock in this part of the island, and the metaling for the roads must be imported; nevertheless, the chief highways of the coastal plains and the pass over the mountains are all macadamized.

In the highlands, where metaling has not yet been attempted, such roads as exist are of a very different type. These are of dirt or clay, well built and maintained, and said to be very good in dry weather.

Unfortunately, we were there when seventeen days of continuous rainfall had reduced them to an almost impassable state of soft mud and slippery clay, and, while our experience is perhaps hardly a fair criterion, I can scarcely believe that with the enormous annual rainfall of

Sumatra such is not the condition a large part of the time.

The road from Medan to the interior, however, gave no warning of what was to follow. Leaving the plains and the tobacco plantations, it gradually ascended through wilder country, and presently, with well-engineered zigzags, began to climb into the mountains.

At 3,000 feet altitude we came to the tiny sanatorium of Bandar Baroe, a recuperating station in the clearer atmosphere of the hills for Europeans of the Deli Company enervated by the unhealthy life of the lowlands. It was a wee bungalow of three or four rooms with a wide, pointed roof of thatch, and from its perch on top of the usual piles it looked out between tall tree-ferns over the plain below.

Here we spent the night, having first applied to the *Controleur* for permission. The native in charge had no supplies, so we had recourse to our own for the first of a series of "tinned meals" that continued without interruption until we returned to Medan.

A WAGON TRAIN OF SHIFTING SHADOWS

In the evening, stretched out in comfortable wicker chairs on the bungalow's little veranda, we watched a train of loaded buffalo carts winding stiffly up the hill in a heavy rain. The air was so fresh and cool it was difficult to think of the hot, sultry coast less than forty miles away. The rain pattered gently on the ground and rolled off the overhanging thatch of the eaves in big drops, while the creaking of wheels and soft cries of the drivers drifted up from the laboring freighters on the road.

For more than an hour the train crept slowly past in a single file of vague, indeterminable shapes, with swaying lanterns casting dim circles of light and queer shifting shadows in the misty darkness. We watched in fascination while the tiny spots appeared out of the jungle below and lengthened into a twinkling line which wound up past the bungalow and disappeared one by one above us into the night and the forest.

Early the next morning we continued our climb over the pass. The semi-tropical vegetation which had succeeded the coarse grass of the denuded plains gave way in turn to magnificent virgin forests, unbroken except for the narrow, winding path of the road.

THE SUMATRAN JUNGLE

The enormous straight-trunked trees, ensnared by giant creepers, vines, and huge air plants, made so thick a canopy overhead that only a dim twilight filtered in, and that failed to reach the ground through the dense, impenetrable tangle of vegetation.

Little brooks of clear water rushed steeply down the mountainside, hurrying along to the sluggish yellow rivers of the plains their tiny contributions for the extension of Sumatra's coast. Butterflies flitted in the blue-black shadows; jungle fowl, their brilliance all subdued in the obscure half light, vanished silently from the edges of the road as we approached, and other little creeping and fugitive things sought the security of the unbetraying jungle.

Insects with voices out of all proportion to their probable size screamed shrilly from the branches, and the occasional whistle of a bird or the dull boom of a falling tree echoed through the silent, dark recesses of the wood.

Much of the life of the jungle we saw along this little frequented road which opened up the very heart of the virgin forest, but infinitely more were we ourselves observed. Sometimes the crack of a broken branch betrayed the hurried withdrawal of a larger animal, or a whirr of wings that of some startled bird; but only one's own sixth sense told of the hidden watchers who silently followed our progress with wondering, unfriendly eyes.

PURSUED BY HOSTS OF CURIOUS MONKEYS

The swaying of branches overhead as we zigzagged up the pass did not mean wind in the quiet forest; it meant monkeys, and their antics were an unfailing amusement, whether we kept on or stopped to watch them. Some waited in silence until we drew near, then plunged back into the forest with a crash of branches which inevitably produced on us the shock they seemed to have designed. Some tore furiously along be-

side us through the trees in a desperate attempt to cross in front of the car before we could catch up to them.

When they did cross, far overhead, in a stream of small gray bodies flying through the air between the treetops, they as furiously raced along on the other side and crossed back again. Others clung to swaying branches and bounded up and down in a frenzy of excitement, shrieking gibes in sharp crescendo as we passed.

Often in the midst of their agitation they suddenly lost all interest and forthwith paid no more attention to us; or sat in silence with weazened, whiskered faces peering solemnly down from the trees.

As in Ceylon, it would have been disastrous to leave the motor unguarded anywhere in a Sumatra forest, for everything that prying fingers could unscrew or remove would soon be reposing merrily in the tree-tops.

There were many tribes of the monkey people: little black fellows with very long tails; troops of impudent brown ones; shy black-and-white monkeys with fine silky coats; and hordes of big gray beasts who chased and tweaked each other, evoking shrieks of protest.

Near by, yet aloof from the bands that fed and gamboled together, were a few enormous black bulks which from the distance might have been curious vegetable formations in the trees. But they moved, and I stopped to examine one through the glasses, when my mother suddenly called my attention to something on the other side.

From a leafy branch less than forty feet away a great round head protruded and a solemn black face, comically like a sulky old savage, gazed out upon us. For a few minutes it stared in silence; then with unhurried, deliberate movements returned to a leisurely search for food.

WATCHING THE POWERFUL ORANG-OUTANG

"Orang-outang," I whispered. "Only found here and in Borneo. There are two more on the other side. . . . See him pull that branch down!" He reached up one tremendous, sinewy arm and with the greatest ease drew down a branch that would scarcely have bent beneath the weight of a heavy man. Holding it with one hand, he pawed idly over it with the other, occasionally transferring some morsel to his mouth and promptly spitting it out if it displeased him.

When the branch was duly inspected he released it, and the *swish!* of leaves as it flew back through the air gave some idea of the strength that had bent it.

There was no need of whispering, for although we watched this one for half an hour with the glasses he ignored our presence completely, and except for the first brief inspection not one of the big apes showed a sign of consciousness of our proximity. They were very well aware of it, but were too powerful for fear, and the orang-outang rarely troubles those who do not bother him. We were not inclined to regret this indifference, however, for the "old man of the forest" can be extremely disagreeable when he chooses.

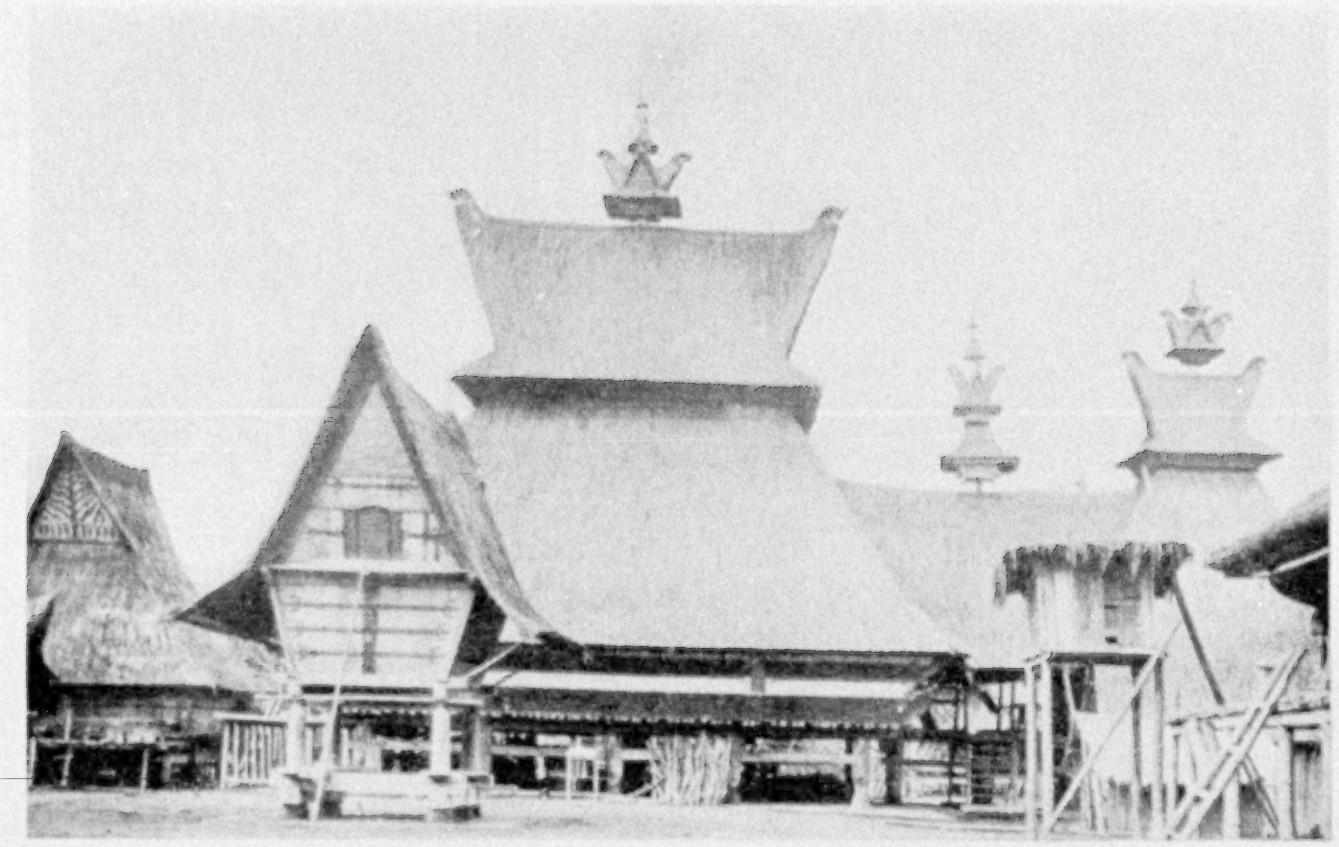
AN UNSOCIABLE JUNGLE BEAST

The other monkeys and apes all moved in troops, but the orang-outangs went alone—severely alone—for their smaller relations seemed to give them a wide berth.

Unlike the monkeys, they appeared conservative of energy, and every movement was carried out with a careful deliberation most amusing to watch. Their huge black bodies were very conspicuous in the trees; their trunks thicker than a man's, with short, heavy legs and arms of extraordinary length and power.

Apparently quite satisfied with the food within reach, the great apes moved lazily along the branches, holding on with their feet and scarcely changing their positions while we watched them. One eventually decided to transfer his operations elsewhere and sauntered off through the trees, swinging his upright body from branch to branch with powerful, far-reaching arms. His movements were still slow and deliberate, but the progress he made was astonishing, though now and then interrupted as he stopped to investigate some delicacy.

The last we saw of him he was hang-



IN FRONT OF EACH SUMATRAN DWELLING THERE STANDS A SMALL SQUARE BUILDING WHICH IS USED FOR A "GOEDANG," OR RICE GRANARY

ing serenely by one long arm, indolently exploring a branch with both feet and his other hand.

The Boekit Barisan, a series of mountain ranges running the whole length of the island near the western coast, splits in the north into parallel chains which encircle the broad Karo-Batak plateau and the vast area of Toba Lake. In these partially explored ranges there have already been discovered ninety volcanoes, twelve of which are now active, the constructive and destructive forces of Sumatra's formation.

The road from Deli crosses over the northeastern part of the parallel chains into the Batak Highlands, as the plateau is called, by a pass between the mountains Sibajak and Baros.

As we neared the summit of the pass a narrow break in the forest revealed a superb view through the trees, over the blue ravine and densely timbered mountainside, to the wide coastal plain shimmering in the heat-haze below; then the foliage again closed in until we reached the height-of-land and looked out on the other side.

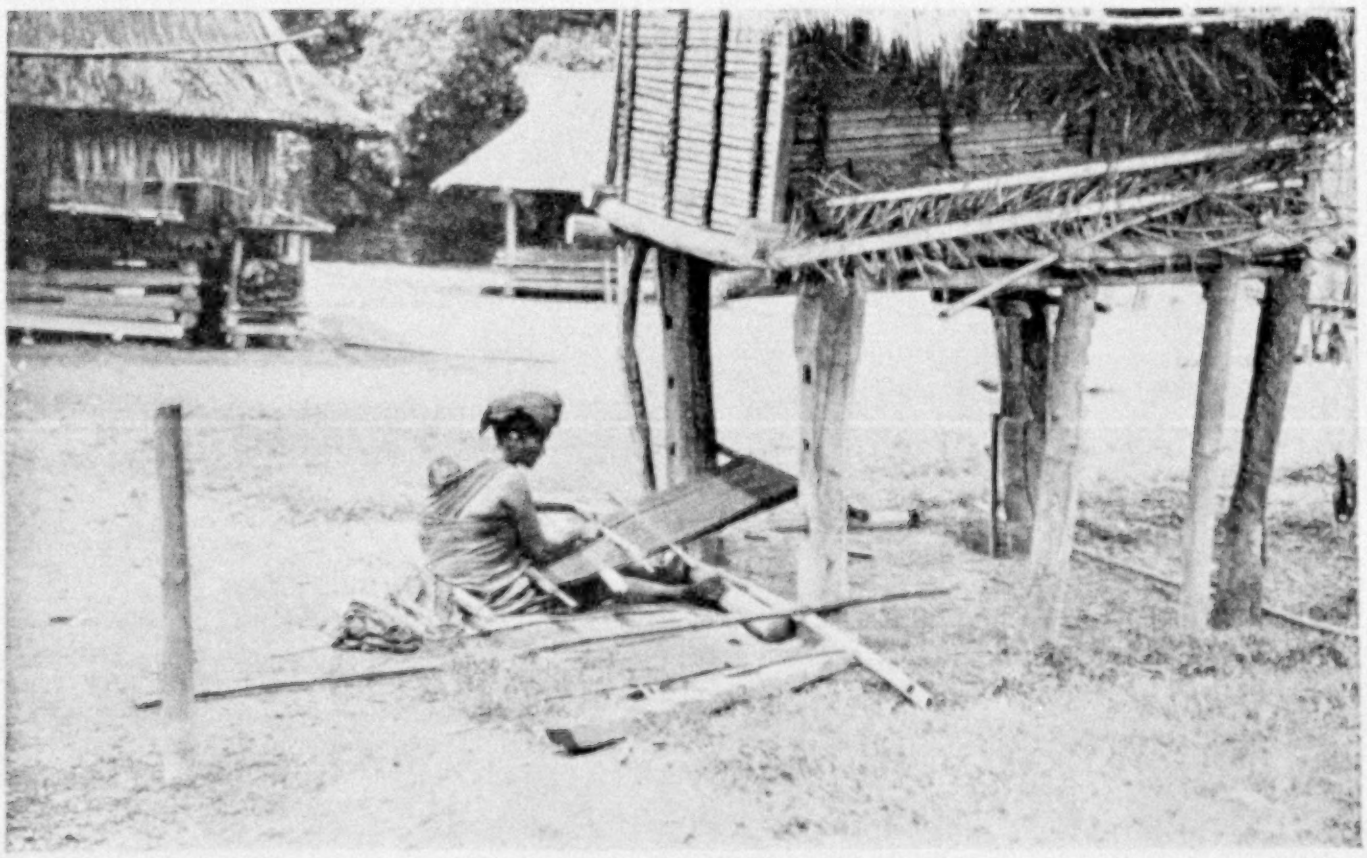
A dull, treeless expanse, scarcely lower than the top of the pass, stretched out before us in limitless brown waves, a desolate tangle of grass broken only by detached volcanic heights. Two active volcanoes, the northernmost of the range, towered threateningly above the others—Sibajak guarding the entrance through which crept the highland road; Sinaboeng rising from the plateau in majestic isolation, its smoke-crowned peak and deep purple sides outlined against the heavy white clouds that hung behind it.

A LAND THAT NEEDS PEOPLE

The first strong impression of loneliness and monotonous solitude that the highlands gave was little changed by the few scattered compounds and occasional patches of cultivation later revealed as we progressed.

In common with the greater part of Sumatra, which could easily support twenty-five times its present population, this section is sparsely inhabited and the villages are small and far apart.

The Batak tribes lead a communistic life, and outside of the hedged confines



THE SUMATRAN MOTHER IS NEVER PREVENTED FROM DOING HER DAILY STINT OF WEAVING BY HER LATEST BORN, WHO IS STRAPPED ACROSS HER BACK

of their compounds—each a little cluster of huts around a large central house—very few buildings are found. The Bataks are mostly peaceful and industrious, occupying themselves with agriculture and farming as well as in hunting and fishing. Their agriculture depends upon the rainfall, which, however, rarely fails; but it consists only of little patches of rice and other grain struggling weakly against the all-encompassing rank growth and is barely sufficient to supply their own modest needs.

Not far from the top of the pass we overhauled the long train of freighters which we had watched in the rain of the evening before creeping up the mountain side past Bandar Baroe. The two-wheeled carts, with low, roughly thatched roofs of branches, extended in a close single file far out across the plain, with the thin legs of their red-turbaned Tamil drivers dangling between the shafts.

The buffaloes were dry and dusty, and by the discouraged droop of their heads seemed to express deep discontent with the wallowless uplands. Among the slate-gray backs of the slow-plodding line, half a dozen light pink albinos—an absurd color on an animal of that size—regarded us suspiciously out of curious white eyes.

THE SIMPLICITY OF THE WOMEN'S ATTIRE

Except for this train, we saw no vehicles in the highlands, but several times passed little groups of pedestrians walking single file along the roadside, on their way to or from one of the markets that are held at intervals in the different Batak villages. Some were even tramping from the other side of the mountain, for since the building of the road the Bataks frequently trade with the nearer compounds of the Deli plain.

Almost all were women, balancing heavily packed baskets of fine matting on their heads, with babies astride their hips, supported by a long scarf tied over one shoulder. The simplicity and similarity of their dress was striking, after the variegated colors favored in Java and Malaya, one dark blue garment—a long *sarong* hung loose from under the arms or around the waist—sufficing in the majority of cases.

Their turban-like head-dresses were of the same dark-blue cloth, peculiarly folded, with drooping corners sometimes

A NATIVE CLOTH FACTORY

Evidently "industrial employment" does not tend to race suicide in Sumatra.

used to support part of the weight of enormous coiled silver earrings.

We rarely saw men on the road; the few that accompanied the women strolled along behind, quite unencumbered with either baggage or babies, and saluted us with a friendly courtesy rather unexpected in a tribe once so notorious for cannibalism. Their garments were quite similar to those of the women, with a shorter *sarong* tied around the waist, and often a coat or short pair of breeches in addition.

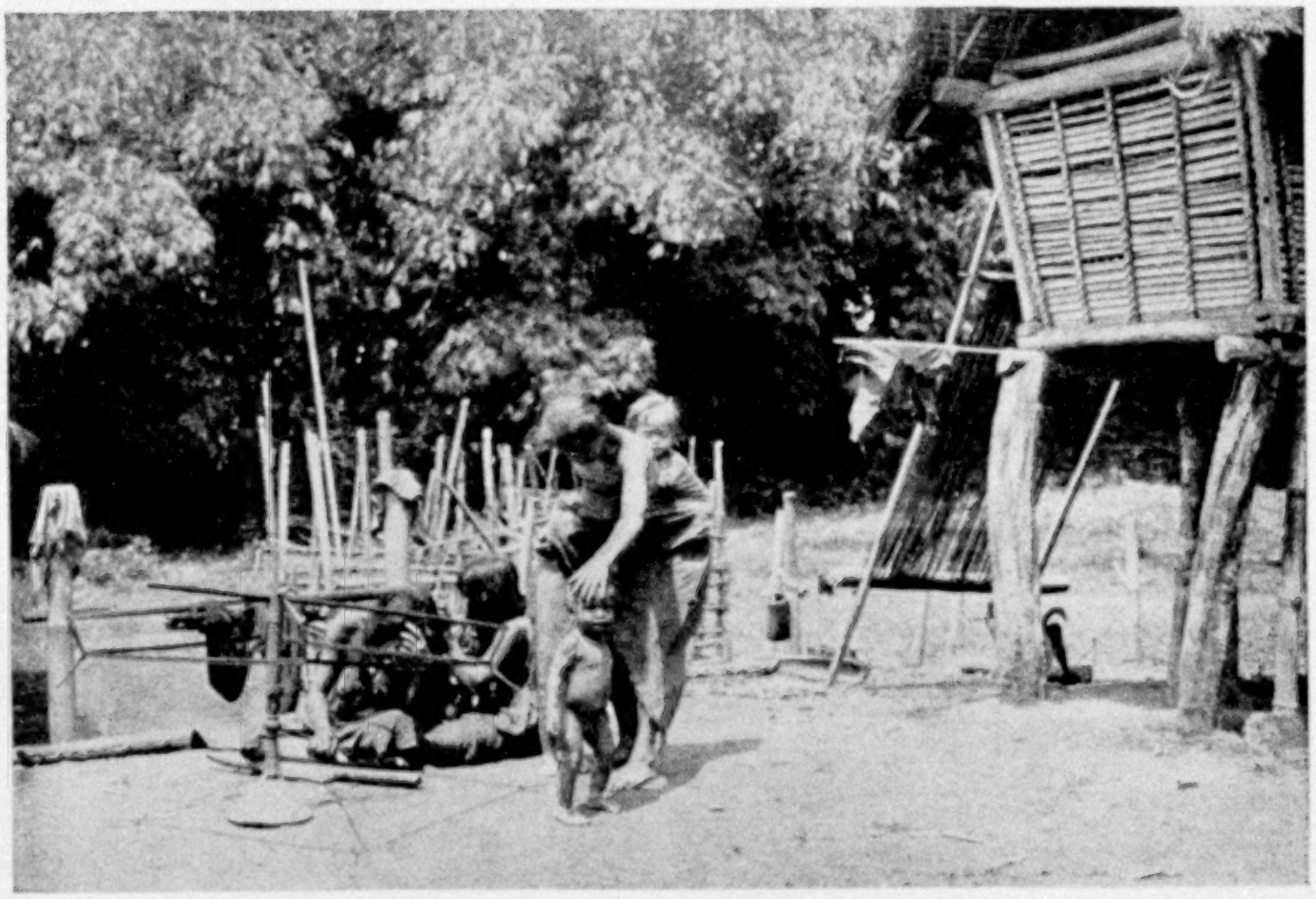
Both men and women were barefoot, as usual, and although a stripe or a plaid occasionally varied the dark blue of their clothes, exceptions to the general style were very rare.

The earrings worn by many of the women were of extraordinary dimensions. Only the wealthier could afford them, for each pair was worth about one hundred and fifty gulden and must have represented a considerable part of the family treasure. They consisted of long circular rods of solid silver, about three-eighths of an inch in diameter, passed through the upper part of the ear and bent back into the form of double, reversed coils, the coils projecting far forward on the left side, to the rear on the right. Their weight would have torn them from the ears had they not been partially supported by the corners of the headdresses, and there was apparently no way of removal without first uncoiling one side.

THE BATAKS, KINDRED OF THE HEAD-HUNTING DAYAKS

The Batak people are in many ways the most interesting and remarkable of all the tribes of Sumatra, although as yet comparatively little is known of them. Ethnologically they are related to the head-hunting Dayaks of Borneo.* Their type has not been modified by contact with the outside world, nor even with the more advanced peoples of the coast, and their state of civilization and development is still quite rudimentary, al-

*See "Sarawak, the Land of the White Rajahs," by Harrison W. Smith, in THE GEOGRAPHIC for February, 1919.



AS A SOCIAL CENTER THE HAND LOOM AND THE YARN REEL IN SUMATRA TAKE THE PLACE OF THE VILLAGE FOUNTAIN IN THE NEAR EAST

Many of the sarongs made by the natives are elaborately interwoven with gold threads. They are lacking in originality of pattern, however. The silver filigree-work of the men is much more artistic.

though it is thought that they were once more advanced than they are today.

The reports of early Arabs trading with the Sumatran coast gave the Bataks their evil notoriety as cannibals, eaters of captives, foreigners, and their own aged and decrepit relatives.

The half million Bataks scattered throughout the mountains and uplands of northern and central Sumatra are roughly divided into groups according to differences in dialect. Over a fifth profess Mohammedanism and about half that number Christianity; but in both cases the faith amounts to little more than a form of superstition, showing only vague traces of those beliefs and hardly affecting the village law of racial customs and traditions.

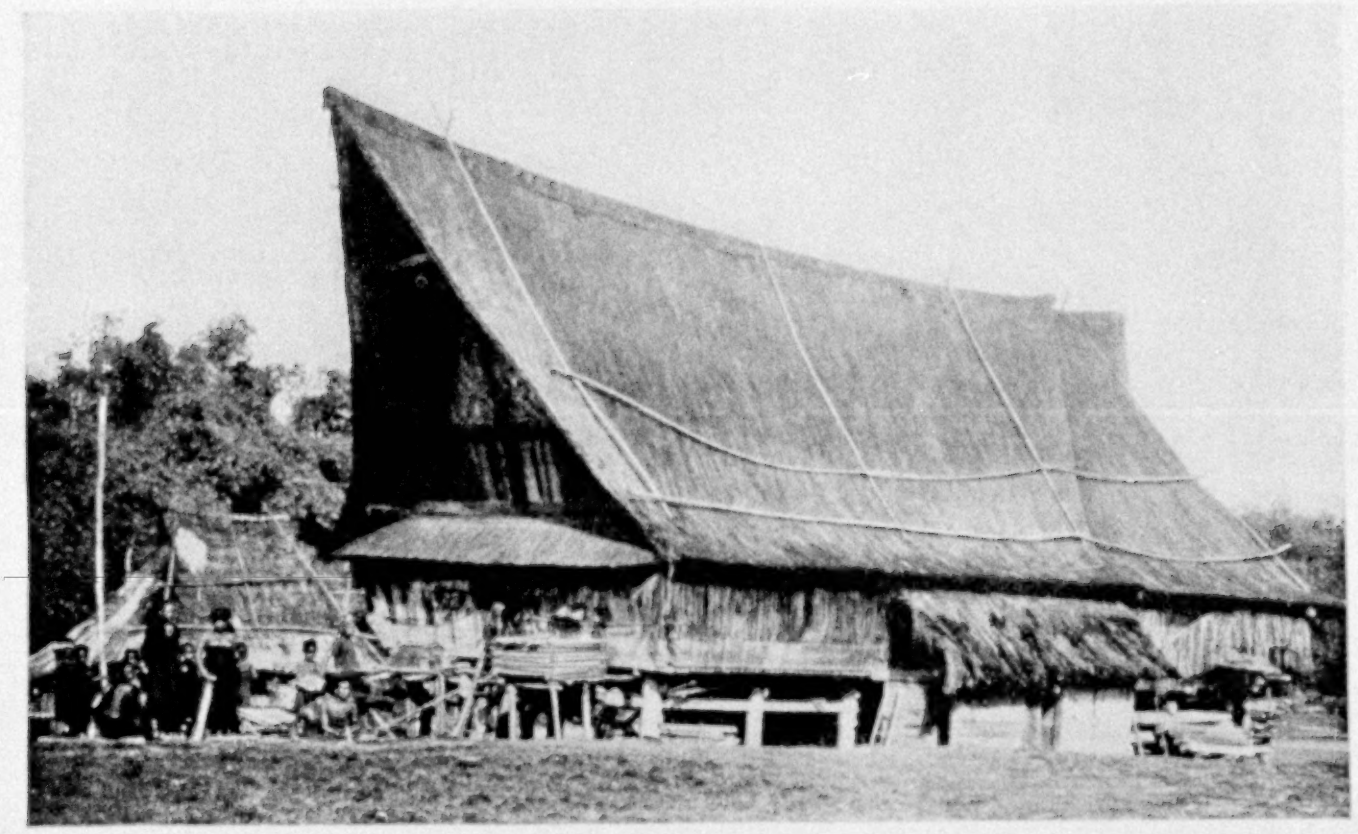
The remainder, including the Kara-Bataks and the tribes of Toba Lake, are animistic pagans, and the circumcision practiced by the former, although doubtless due to some forgotten Mohammedan influences, is not a religious rite.

It is now general in the case of most of these tribes to refer to cannibalism as a practice of the past and at present non-existent.

CHEATING DEATH BY GIVING ONE'S BODY TO BE EATEN

As to whether or not any tribes continue the practice of eating their aged and decrepit relatives I found a divergence of opinion among the European residents of Sumatra. This form of cannibalism is by no means rare, and usually consists of the ritual killing and consumption of old and infirm males by the younger members of their own tribe.

When the aging warrior feels the waning of his powers, he climbs into a tree encircled by his relations, who dance and chant below. The old man presently drops to the ground, symbolic of the fall



THE COMMUNAL HOUSE AT KAMPONG KINALANG, SUMATRA

Note the means by which the thatched roof is anchored, awakening recollections of the stone-weighted chalets of Switzerland. Many of the houses in Sumatran villages are communal in character, three or four families living in the same dwelling. In places where the natives have come in contact with the Dutch, the interiors of their homes are not without modern conveniences, such as beds, pillows, and canopies. These houses are more comfortable than those of any other people in the Dutch East Indies.

of a ripe fruit, and is knocked on the head and promptly eaten. In this both parties are mutually benefited: the consumers in partaking of the wisdom of their late progenitor; the eaten ancestor by finding immortality as a dimly conscious member of the bodies of his strong, young descendants.

To an animistic form of religion which regards the decay of a body in the ground as the end of all existence, this method of cheating death is welcomed alike by the failing tribesman and his younger relations. Not infrequently the practice is extended to the unfortunate strangers falling into the hands of such tribes, who are devoured that their capturers may receive the benefit of whatever wisdom they happen to embody. To this, rather than to a mere partiality for human flesh, cannibalism as practiced by many tribes may probably be attributed.

Dark clouds presaging the usual rain of afternoon had already appeared on the horizon when we stopped for a hasty tiffin by the roadside. The rains of many afternoons had reduced the road to a bottomless morass of mud and clay, for we had left behind the last traces of metaling a few miles after clearing the mountains.

While the average altitude of the plains is about four thousand feet, the level of the rolling surface varies more than a thousand, and the steep clay hills become appallingly slippery when wet. Up these the car barely crawled, moving crab-fashion, with the rear wheels revolving furiously in spite of "non-skid" tire chains, and flinging unbroken streams of clay-mud in all directions, which my boy Joseph vainly tried to dodge while he threw armfuls of cut grass under our track.

On the down grades we tobogganed with hair-raising speed, wheels locked, and the whole road surface sliding with us, frequently finishing up in the ditch if there happened to be curves on the descent. Fortunately the ditches were

ALL OF THE NATIVE HOUSES OF SUMATRA ARE PERCHED ON STILTS, USUALLY ABOUT SIX FEET HIGH

This practice in home-building suggests to some students of ethnology the thought that the Sumatrans were originally a maritime and water-loving people, who built their houses on posts in the water. They gradually migrated inland, first up rivers and streams, and finally into the interior.

not very deep, but they were quite enough, in their saturated condition, to call out the shovel before the car could be extricated.

Near the mud-hole in which we elected to stop for tiffin, fifty or sixty Batak women were holding a market, all squatting about on the ground, surrounded by piles of dried palm leaves, rattan, and big woven baskets full of grain, dried fish, and various other comestibles.

As seemed generally to be the case throughout the highlands wherever work was in progress, men were conspicuously absent, and the women bargained and gossiped or waited for some one to come and bargain with them, paying little heed to my intrusion in search of photographs. A few were young and not uncomely in feature, but the vast majority appeared old and hideous, the inevitable results of early marriage, overwork, and, above all, the custom of filing the teeth.

THE PRACTICE OF FILING THE TEETH

This practice is quite common among the tribes of Sumatra, and with the Bataks it is invariable among both sexes. The operation, an extremely painful one, is begun at an early age and continued until maturity, when both sets of teeth have been completely filed away down to the jawbone. Although the Bataks' usual food of rice, syrup, and finely chopped meat and fish is soft and easily digested, their inability to chew must be a serious physical disadvantage.

The custom originated as a form of personal adornment, no more strange than many similar practices among other wild tribes of the tropics; but the reasons for it do not seem to have been inherited with the practice itself. To my repeated inquiries the answer was always the same, the usual native explanation for native customs—"Batak people have always done so."

The afternoon rain came up earlier than usual and caught us on a winding ascent to one of the higher levels of the plain. Our doubts of ever reaching the top grew very acute, but after many futile attempts and the burial of a great deal of grass in the deep ruts made by the whirling rear wheels, the car struggled up and we were saved from another night in the open.

The rain was falling in floods when we finally splashed and skidded into the little compound of Sariboe Dolok and sought the meager protection of a tiny rest-house. It had two dark little rooms with a kitchen house in the rear, and as I groped my way inside I sprawled over the body of a large tiger. It was quite dead, but the encounter was somewhat startling.

The house boasted of little in the way of furniture or supplies and the night was very cold, but we were comparatively dry and were offered the luxury of a chicken for supper.

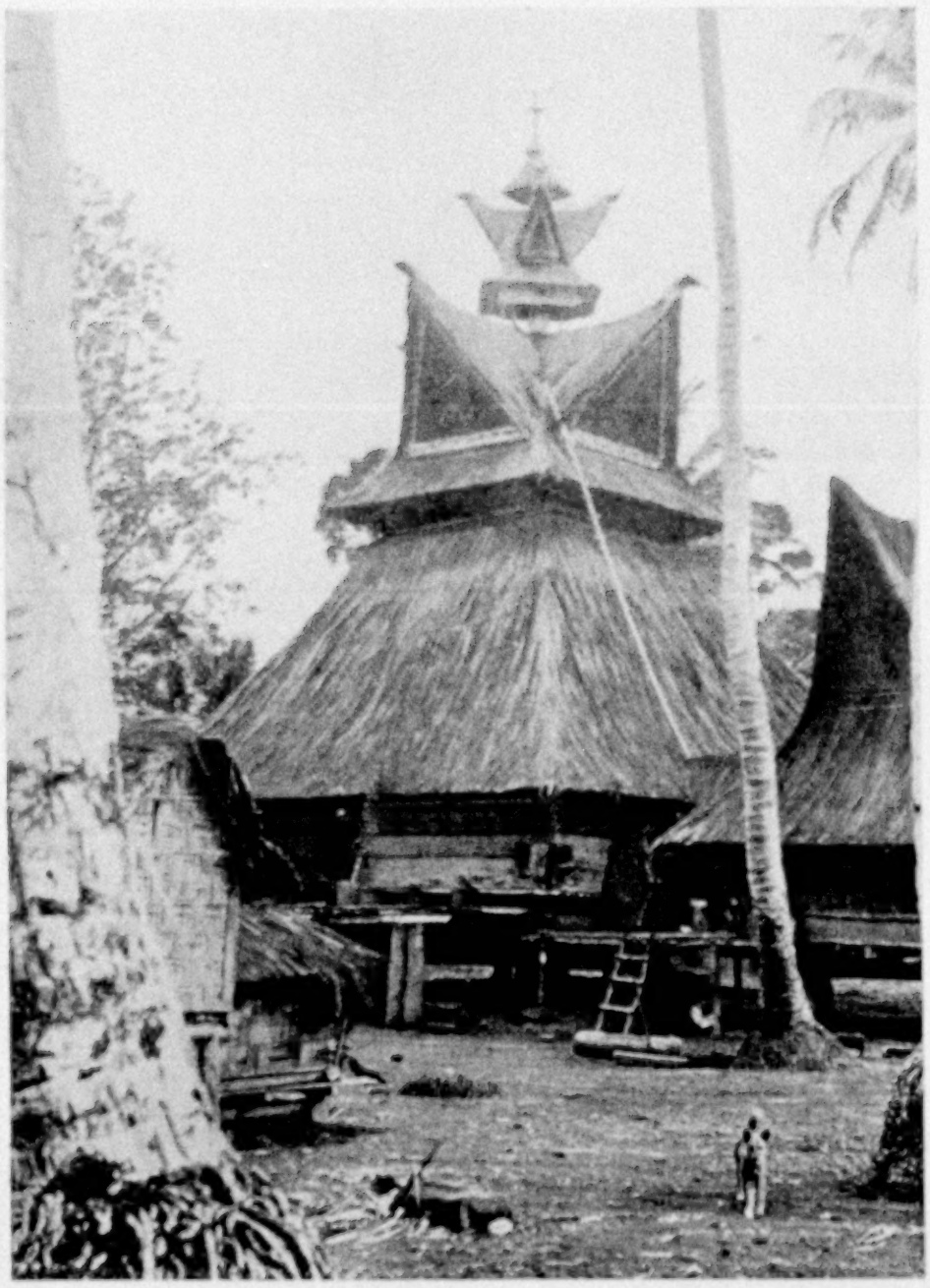
"Luxury" is perhaps a trifle eulogistic for the rubber-like fowl that was set before us. Had we been able to eat him, we might, like the Batak cannibals, have absorbed the wisdom of his hardy experience; but life had been too long and death too recent to admit of any such liberties with the corpse.

Sariboe Dolok, the capital of Simelungen and Karolanden, is not of the importance that its official title might suggest.

It is a lonely settlement of eight or ten native houses, an opium store, the guest-house, and the bungalow of the Assistant Resident, whose life there must be anything but socially gay. This courteous official spoke excellent English, as do the majority of Dutch in the colonies, and, besides affording a great deal of information, made us a present of six eggs—a welcome addition to our tinned supplies, as we had found eggs an unprocurable commodity, even where chickens were to be had.

I also learned from him that the *Kampong* Kebon Djahe, architecturally the most interesting of the Karo-Batak villages and the one I was most anxious to see, lay about twenty-five miles back by the way we had come, on a hill nearly a mile off, and not visible from, the main road.

So the following morning we retraced our way over the fearful clay-mud track, by no means improved by the evening's downpour, until we came to a half-obliterated trail leading westward toward two isolated little white houses. These formed



A COMMUNAL HOUSE IN THE KARO-BATAK COUNTRY

The independence of the native women impresses European travelers as most unusual for an Oriental country. This independence may be the outgrowth of curious marriage customs. For instance, among some tribes a man and woman do not establish a home of their own. The husband remains among his own circle of relations and resides only temporarily with his wife. The children remain in the mother's custody and inherit all of her property, as well as half of that earned by the father and mother together. The remaining half goes to the father's sisters or to the children of those sisters.

the "Government Center," or "European Quarter," of Kebon Djahe, and half a mile beyond, perched on the top of a steep clay bank above a small river, the remarkable buildings of the native *kampong* lay hidden away in a clump of trees.

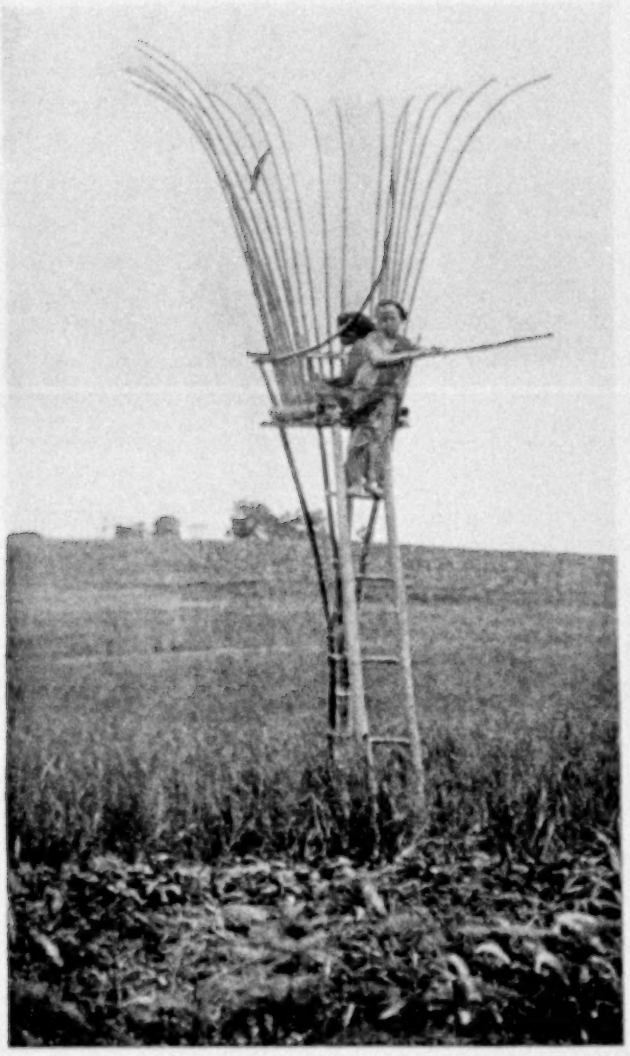
A REMARKABLE BATAK COMMUNITY

In their chief features, all Batak *kampongs* are more or less alike, but in architectural elaboration Kebon Djahe is unique. Confined, as usual, within a rectangular space of smooth-trodden clay hedged by a bamboo thicket, the buildings were all raised on wooden piles, their immense thatched roofs and extraordinary decorations completely dwarfing the low, windowless sides.

Clumps of plantains, encircled by fences of woven bamboo, sprung like oases from the hard clay ground, and innumerable evil-looking dogs, chickens, and black pigs scratched or rooted in the rubbish beneath the houses. The buildings ranged in size from little granaries and storehouses of quaint and graceful design to the huge communal house, where the men deliberate and banquet and where the fetishistic treasures of the village are kept and friendly strangers entertained (see illustration on this page and on page 76).

Each end of the larger houses terminated in a narrow veranda of bamboo poles, with a bamboo ladder or a notched log leading up to the small opening which it gave into the dark interior.

The immense roofs sloped uniformly on the sides from widely flaring ridges to low, overhanging eaves, but the ends were broken in about half way down, forming great gables beneath the jutting ridge-poles. Brilliantly colored matting woven into artistic designs filled these triangular



AN ELABORATE "SCARECROW" ERECTED TO PROTECT SUMATRAN GRAIN FIELDS

This lookout is made of bamboo, and from the numerous poles long strings are run to all parts of the field. On these strings are tied bits of cloth, which are made to dance as the boy watchman strikes the pole whenever feathered marauders appear.

POUNDING GRAIN: IN SUMATRA THE MILLER IS THE DAUGHTER

The European traveling in this island frequently finds it difficult to get food, especially in the season when vegetables are scarce. During the wet season the natives live almost exclusively on rice. The cereal is cooked very dry and eaten with salt and peppers.

spaces and closed the similar ends of huge dormer-like projections thrown out from the roofs of the more pretentious buildings.

On the communal house and a few others, the vast roofs had a double overhang, with gigantic, top-heavy cupolas towering above them, thatched and shaped in miniature of the dormered roofs below. From their corners, and from the ends of all the ridge-poles and the blind dormers carved wooden buffalo heads with arched, white-painted necks and savagely lowered horns, looked fiercely down to challenge the intruder.

The cupolas were surmounted by curious wooden figures, some on foot, some riding Batak ponies, but all, brilliantly colored, facing out over the treetops, with hands raised in supplication toward the little white house of the Dutch Controleur on the plain.

A PIGEON-HOUSE AND A TOMB

Beside the communal house stood two remarkable structures quite similar in design, both gay with colored carving and decoration. One was a pigeon-house; the other a tomb, from within which the upright body of the last head-man looked out on the village he had once directed.

Under the thatched roof of an open building near by, a group of women with long poles were pounding grain in hollowed-out wooden logs, while other blue-garbed figures, bearing flat trays or

TWO LITTLE PIGS WENT TO MARKET

The live-stock market of a Sumatran village is a lively scene, with its excellent cattle, closely resembling the Alderney type, its porkers, wiry little ponies, goats, and Indian buffalo.

woven baskets on their heads, moved about the inclosure at their various occupations. A few men idled around, but showed little interest in any work more strenuous than chewing *sirih* or following the various strategies I had to employ to obtain the photographs I wanted.

STRENUOUS OBJECTION RAISED TO THE CAMERA

As was often the case in the highlands, the natives, especially the women, were averse to having a one-eyed devil-box aimed at them, and even my disguised efforts in this direction were regarded with deepest suspicion and not infrequently thwarted. With the additional limitations of low-hanging clouds and lack of direct sunlight, and the penetrating moisture so disastrous to films, photographic results in the Batak country were never wholly dependable.

Kebon Djahe was unlike any other village I have ever seen. For several hours we roamed around, exploring the compound, fascinated by all its singular picturesqueness—the remarkable sky-line of the roofs and their fantastic decorations, the blue-clad figures grouped at their divers tasks below, and the effective blending of brilliant colors with the green of bamboo leaves and grayish brown of the moss-covered thatch.

THE AUTOMOBILE DROWNS IN MUD

The sun had gone down unobserved in the clouds and the early twilight had fallen before we left Kebon Djahe. Vague misgivings of the road from there to Sariboe Dolok in the dark had begun to assail my mind, when the car, which had been rocking and skidding over the rain-soaked trail, suddenly plunged deeper into the mud, stopped short, and began to sink.

There was a little hole in the center of the track, no bigger than a man's hand, which on the way up had scarcely been noticeable, but in passing over it in returning, the whole road seemed to open up and engulf us. A furious effort to clear the chasm, whatever it might be, only succeeded in hastening our doom. When we stopped settling the car was so deep that a list to the right brought the

top, which was up, to the level of the road surface, while between the top and the ground on the other side there was barely enough space left to crawl through.

Any further sinking of the car might have permanently imprisoned us, so we hastily crept out on our stomachs through the sticky clay-mud and viewed the catastrophe. It was not encouraging. A careful survey of the car showed it to be hopelessly buried, beyond any possibility of my disinterring it unaided.

The chainfalls, in the equipment box on the rear, were completely out of sight some four feet underground; but even had I dug them out there was nothing to which to attach them, and in any case the car was too thoroughly in the grip of the mud to have yielded to single-handed efforts.

With some difficulty I discovered the cause of the accident. A bamboo culvert far under the road, which had rotted peacefully and undisturbed since it had been laid, had finally collapsed from our weight, after being weakened by our first passage over it.

EVERY MOTHER IS HER OWN PERAMBULATOR IN SUMATRA

To extricate the car was a task for a first-class train-wrecking crew, and I felt little confidence of being able to raise half a dozen helpers in that country, especially as I had left Joseph in Sariboe Dolok and would be unable to explain our predicament to any natives I might meet.

Kebon Djahe seemed the one light on the situation; but night was falling rapidly, and as my speedometer cable had broken in the morning and there were no noticeable landmarks, I had only a dim idea how far away the compound might be.

For my mother to be left alone at night in the wilds of a country until recently addicted to cannibalism, while I set out on an indeterminate search for help was an unpleasant prospect; but as Kebon Djahe might have been eight or ten miles away—a nasty walk in the mud and the dark—that seemed the only solution.

NATIVE PRISONERS MARCH TO THE RESCUE

For over an hour I walked, or rather waded, down the road in the utter stillness of the desolate highlands. Then a few barely audible shouts drifted up from across the plain, and I struggled through the grass in their direction to a tiny paddy field on the top of a low hill.

WOMEN OF CERTAIN SUMATRAN TRIBES ARE NOTED THROUGHOUT THE DUTCH INDIES FOR THEIR BEAUTY

On "Passar," or market days, wonderful arrays of strange fruits and vegetables are displayed for sale, and on special occasions children's toys, ornaments for head-dresses, cooking utensils, and cloth of gay colors may be purchased. Among the tempting edibles are peanut cheese and pineapple sauces. The palm wine of Sumatra is most refreshing on a hot day—and all days are hot in the lowlands.

Through the dusk I could see a little bamboo lookout, such as is erected in every grain field, and, squatting on its platform, two blue-clad figures, who stopped their shouting as I approached. But to my weak efforts in Malay they merely stared in silence and continued to jerk on the strings which, tied with fluttering bits of cloth, intersected the field to frighten away feathered marauders.

From the hill, however, I discovered in the twilight two solitary little white houses about a mile away and struck off to investigate. Soon a tiny light sprang out of the darkness, and when I arrived in its cheery glow I found the Dutch Controleur just returning from inspecting a jail which was in course of construction, and I accosted him with my tale of disaster and appeal for help.

"Certainly," he promptly said, as if foreign motorists mired in the interior of Sumatra came to him every day with requests to be dug out, "I will lend you my prisoners."

Although his jail was not yet built, he had a fine collection—thirty-eight Bataks and Achinese in whom respect for Dutch control had not been sufficiently evident. This was my wrecking crew, and joined by a Dutch planter, who was recuperating in the higher altitude of the Batak lands from an assault made on him by two coolies, we marched as if on a night attack back to the buried motor, with two armed native soldiers as a guard.

A "SHIVERY" EXPERIENCE FOR A WOMAN

I had been absent several hours before the lanterns picked out ahead of us the dark outline of the sunken car blocking the road. As we approached I saw the figure of my mother apparently seated in the clay mire of the roadside, with a dozen motionless forms standing in a shadowy row on the bank behind her. She struggled stiffly to her feet, revealing one of the mud-soaked seat cushions that she had succeeded in dragging from the car, and the silent row melted back into the darkness.

"Who are your friends?" I asked,

after ascertaining that she had suffered nothing more than an unpleasant wait.

"I don't know," she replied, "but I'm very glad to have you back. I've felt rather 'shivery'; first watching them appear out of the dark, one or two at a time; then hearing them talk in low voices. I didn't know whether they were planning to eat me or simply discussing why I chose this particular place to sit in. But for the last half hour they have stood like a row of vultures and haven't made a sound, and that was the worst of all!"

"These are not bad people around here," said Mr. von der Weide, the Dutch planter; "but they are not always to be trusted. I do not think it well to be alone in the highlands at night."

Armed with native spades, shaped somewhat like a wide-bladed adze, and a small forest of strong cut poles which we had fortunately discovered piled by the roadside, the crew attacked the motor.

The prisoners were strong and willing; my training in the recovery of automobiles from strange places had been varied and thorough, and, aided by the untiring efforts of Mr. von der Weide, we soon had a wide excavation made around the car, supporting it meanwhile with shores to prevent further sinking.

Then with the poles as huge levers we pried up each end of the machine a little at a time, filling the chasm underneath with a cob-house of other poles cut into various lengths, until the car, resting on a wooden pier, rose to the road level and was dragged to comparatively firm ground. I scraped off the worst of the clinging mud from those parts that were completely choked with it, and coaxed the motor into starting.

There seemed to be no damage except for twisted mudguards, and we ran back to Kebon Djahe accompanied by Mr. von der Weide, who insisted on our spending the night there—we did not require much urging—while our army was marched ceremoniously back to jail.

The night was extremely cold, at least for within three degrees of the equator, but we had been spared the usual evening storm and although plastered from head to foot with clay mud when we came in, we were very comfortable.

In the morning, after a very early breakfast of Dutch cheese, brown bread, and delicious cocoa, and another hour or more spent in wandering about the fascinating buildings of the native compound, we ran back to Sariboe Dolok. The road, although still in a wretched condition, had dried considerably, as there had been no rain the previous day, and we reached Sariboe Dolok without difficulty, picked up Joseph, and kept on toward Toba Lake.

HOW THE NATIVE MOTHERS WEAVE

Not far beyond the Assistant Residency was the small compound of Kinalang where we made another long stop. It was concealed by the customary thicket of bamboo, and although the houses were smaller, poorer, and not nearly so elaborate in design as those of Kebon Djahe, the native life was even more interesting.

Scattered about the inclosure were crude bamboo frames, attached to the piles of the houses or to poles driven into the ground and fastened at the corners with straw rope. At these the women of the village were seated—their legs stretched out on the ground before them and one end of the frame in their laps—and with the most primitive kind of equipment were producing the *sarongs* for which Kinalang is noted throughout the highlands (see illustration, page 84).

Their movements seemed in nowise hampered by the babies tied on their backs, nor were the babies themselves in the least disconcerted at having their small heads almost snapped off as their mothers worked.

Large bamboo reels held the yarn to be transferred to the spindles, and in little bamboo pails beside each frame were the strong vegetable dyes which the weavers applied on their work, spreading the color with bunches of chicken feathers, while they kept shooting the spindles from side to side between the separated strands of the warp.

In spite of its thriving industry in *sarongs*, the houses of Kinalang showed none of the neatness and decorative features of those of Kebon Djahe. All, except the huge, oddly shaped communal building, were loosely thrown together,

SUMATRA PROBABLY HAS THE MOST REMARKABLE VEGETATION IN THE WORLD

Here are seen the giant "elephant ears" and other characteristic plants and vines which the jungle sends out to recover the land stolen from it. One plant, the *tjindaweanmatahara*, has a blossom more than three feet in diameter.

sided with strips of split bamboo or rattan, carelessly thatched, and appearing as if the first strong wind would blow them to pieces.

The interiors were dingy, littered with utensils, and filled with smoke and soot from the open fires that burned in the center of their bamboo floors, while dogs and chickens shared with the owners what little space was left.

SUMATRA'S LARGEST LAKE

About two miles from Kinalang the road descended in a sharp curve, plunged through a narrow cut, and, emerging abruptly on the sheer edge of the plateau, revealed a superb view of Toba Lake, over a thousand feet below.

Toba Meer—the Sea of Toba, as it is called—is the largest inland body of water in the Dutch Indies. It covers an area of nearly eight hundred square miles, entirely hemmed in by the mountains of the Boekit Barisan, at an altitude of about 3,100 feet, and it averages nearly 1,400 feet in depth.

We followed the uncompleted road to its sudden end, about two miles below, and then stopped to eat our tiffin and enjoy the magnificent view. The rugged mountains rising precipitously from the dark water, and the narrow, fjord-like recesses of its winding arms, gave an extraordinary beauty to the great highland lake, which from that point was not unlike the Bocche di Cattaro seen from the Montenegrin Pass.

A cataract tumbled down the mountain side opposite; far below us the fantastic roofs of the village of Harangaul showed picturesquely above a grove of fruit trees in the midst of the green paddy fields of the rich ravine, while out in the lake the long, narrow canoes of the Batak fishermen slipped through the blue shadows, with an occasional glint of wet paddles and dripping nets.

We left reluctantly to return to where the road had branched off, backing up to the plateau again because the unprotected trail was too narrow to enable us to turn the car, then continued down the lake.

The road had dried off rapidly and for more than half the distance was vastly

better than above, as well as traversing a more wooded and much prettier country. There were, to be sure, two narrow rain-soaked cuts where the water had not run off, through which the car barely succeeded in struggling; but the highland roads had made us indifferent to anything short of being permanently mired.

A MEETING OF BATAK AND MALAY HEADMEN

We made further stops at two other diminutive compounds. In Poerba Dolok, as at Kinalang, the women were weaving *sarongs* and pounding rice; at Pematang Rajah there was a market, and a meeting of Batak and Malay headmen — gorgeously dressed, with huge golden buttons in their jackets, finely wrought bracelets around their arms, and *kris* with beautifully carved hilts stuck into the brilliant sashes at their waists.

As we left this picturesque group and drove slowly on, a bamboo chair swung high on the shoulders of four bearers appeared hurriedly up the road, and from it, as we passed, a wife of one of the chiefs gazed curiously down at our unfamiliar equipage.

Shortly behind her, preceded by dire shrieks, three men in equal haste to reach the market came trotting around a corner, each carrying two live black pigs tightly bound in split bamboo and protesting volubly, as they were swung at the ends of the shoulder poles.

We ran over a swampy road, gradually working upward, across a desolate, grass-covered plain. Only a few mountains dim in the distance gave any sense of limit to the rolling plateau, and except for the swift-flying wild pigeons, a few of which I shot to add variety to our larder, there was nowhere any sign of life.

Dark, ominous clouds bore down upon us as we splashed over the soft level stretches, skidded down short, slippery descents, and labored on the upgrades among the holes and crevasses of deep washouts.

In one place the road was evidently being lowered, and for several hundred yards more than half of it had been cut away, leaving a shelf on one side too narrow to drive on, and on the other a six-foot trench which was simply a morass of mud and water. As the shelf was quite impossible, I chose the trench, started up it with a rush, and promptly stuck fast.

No efforts could move the car in either direction. The sticky clay formed solid disks about the flying wheels, completely hiding tire-chains and rope under its smooth yellow coating.

After an hour of unavailing labor, Joseph and I abandoned the effort to extricate the machine, and as darkness was rapidly falling we held a hurried consultation to determine what should be done. It was finally decided to desert the car and attempt to flounder through the mud to the nearest native village. It was a desperate decision, but the only alternative was a night in the car.

Detaching one of the side lamps, whose fitful rays would enable us to avoid the deepest pools of water, the three of us began the sliding, splashing tramp.

About a mile beyond where the car was entombed we came to a cut, and at its edge the dull rays of another lantern showed half a dozen natives putting away some tools in a little shed. Joseph and I immediately scrambled over to question them. Only one spoke Malay; the others were part of his gang of road laborers — an evil-looking lot.

I was surprised at finding human beings there, and, feeling consequent misgivings over the security of our abandoned car and luggage, I asked the man in charge if he or one of his men would, for a suitable consideration, spend the night in an automobile about a mile down the road, to guard it from being molested during my absence. To my astonishment he promptly refused, and, asking the question in turn of his men, met with immediate negatives.

THE NATIVES' DREAD OF TIGERS

I could not account for their unwillingness. The cushions of the tonneau would surely afford as comfortable quarters as any they were accustomed to; it could not be the storm of which men of the

KARO-BATAK WOMEN AT MARKET. NOTE THEIR CURIOUS TOWEL-SHAPED HEAD-DRESSES

The whole island of Sumatra might be termed a vegetable and fruit garden. It is famous for its pepper plantations, its orange, lemon, and pomegranate groves, its coffee and tobacco. The climate of the island is tropical, the equator bisecting it. The average annual rainfall varies from 98 inches in the "dry country" to 139 inches in the wet region.

highlands were afraid; and the reward I had offered, though small enough, was probably equivalent to about a week's income.

Then it occurred to me that they were afraid of the automobile itself, and I hastened to assure them that it was not only dry and comfortable, but quite safe; that I had locked it up, and that it could not move until I myself released it.

"Oh, it is not that," said the spokesman, with an air of having slept in automobiles most of his life.

"Well, what is it then?" I was both curious and a trifle annoyed.

"Tigers."

"Tigers?"

"Yes, indeed," said Joseph nervously, translating. "He say plenty of tigers here come down sure and eat him up!"

"But not in the automobile," I objected.

"Oh, no; tiger first take him out."

I readily persuaded the men to help carry our luggage to the village, five miles as he estimated it, but nothing would induce any of those natives to spend the night within reach of the great prowling beasts.

A walk down the mountain to the rest-house on the lake was quite as arduous as we had feared. The trail descended some 1,500 feet in long zigzags. When we finally reached our destination, my mother was nearly exhausted, and we were both too grateful for the shelter to be critical of what we found. But even so, one could hardly have called the accommodations luxurious. The whole building leaked; it was overrun with toads, lizards, spiders, cockroaches, and various other pests.

We rose stiff and unrested in the morning, but when the early mists had lifted from the green island facing us, the beauty of the clear highland lake banished every thought of weariness and discomfort.

Few lakes in all the world can offer such a setting as the Toba Meer. The encircling mountains of the Barisan chain rise sheer from the water's edge, their guttered sides white-flecked with the foam of many rain-fed cataracts.

In the purple shadows along this somber rim, indistinct little villages cling precariously to the steep slopes, checkered with the tiny squares of a few light green or yellow paddy fields.

Overhead the winds of the monsoon may moan and whistle about the peaks, but the deep blue surface of the lake is seldom ruffled, save by the V-shaped wakes of the dug-out canoes, which skim about like tiny water-bugs in the vast dimensions of the silent mountain amphitheater.

Amid such surroundings we lost all count of time until hunger necessitated our return to the motor car, which was salvaged from the mud only with great difficulty.

Many trials and adventures were encountered in making our way down from the heights, but when we reached Pematang Siantar we were out of the highlands and back again on the coastal plain, although still at a considerable elevation and a long distance inland. The mountains from this point sloped quite gradually toward the sea. It was again warm at night, warm and soggy, and we returned to sleeping *on* the bedclothes, after the unaccustomed treat in the highlands of sleeping under them.

A MALAY COSMOPOLIS

Siantar forms a trade link between the highlands and the coastal regions, and at its market half the nationalities of the Sundas may be found, beside many from the rest of Malaysia, from India proper, and from the extreme East. There in the morning I wandered for over an hour between rows of women and boys who squatted on their heels behind their trays and baskets, while the stream of different tribes flowed steadily past.

Mostly they were Bataks, hideous with red-stained, toothless mouths; Sumatra Malays in brilliantly flowered *sarongs;* and blue-trousered Chinese wearing the typical broad brown topees, or straw affairs woven in the form of baskets and filled with a kind of lacquer.

Others bargained, gossiped, or wandered aimlessly among them — Malays from far corners of the archipelago; pretty Sundanese girls with white jackets and smoothly combed hair; Tamil women in scarlet *sari,* and Tamil men with white *dhoti* and red turbans; Bandjarese, Sikhs, and even wandering Pathan trad-

SALESGIRLS IN THEIR SUMATRAN OPEN-AIR GROCERY STORE

The young woman standing in the central background is wearing the curious coiled silver earrings peculiar to the island. The preparation for the reception of these earrings begins in babyhood, when the lobe of the ear is pierced and a bit of tightly coiled banana leaf is inserted. The puncture is gradually expanded by the pressure of the unrolling leaf.

ers from the Afghan frontier, long-haired and dirty, with heavy, boat-shaped shoes and *lungi* trailing from their rakishly set caps.

THE CHINESE COOLIE'S GROWING POWER

There were many more, but of every five two were Chinese. Some were nearly naked, half-starved new arrivals peddling trays of small nicknacks hung from poles across their calloused, sweating shoulders. Others, laborers earning high wages on the plantations, squatted about a native restaurant in one corner of the market, talking at high speed with their mouths full of rice or sundry delicacies that no one else would eat.

And there were many, sleek, well dressed, and bejeweled, who had passed in a brief time through both these first stages and now showed the result of indifference to privation and an infinite capacity for overwork, the only assets brought with them from the Middle Kingdom.

The irrepressible Chinese immigrant coolie seems destined to become the financial power of Sumatra, as he already is in Malaya, Java, and elsewhere in the East Indies.

From Siantar we ran back to Medan. The road was hard and dry, a trifle rough at first, but such a transition from the soft ditches we had been following through the highlands that the very steadiness of our progress began to alarm us.

After the conditions of Batak highways, an uninterrupted run of thirty-five miles makes one gravely expectant of dire things to follow; but the road grew better instead of worse, and we drove into Medan early in the afternoon with a ninety-mile run behind us—our longest in Sumatra.

Before we reached Medan we passed a heavy, two-wheeled transport cart on its way to some estate, drawn by the most enormous buffalo I had even seen. A thin, sweating Chinese coolie walked beside it, wearing a battered pair of blue trousers and a round, peaked hat of bamboo, undoubtedly the aggregate of his worldly possessions. Just as we drew alongside, the buffalo got wind of a near-by wallow, stretched his neck, and snapped the extremely simple harness—a piece of rope holding the wooden collar to the shafts.

While the huge beast ambled off to enjoy his mud bath the coolie repaired the harness by unraveling a few lengths of thread from some burlap sacking in the cart, plaiting it into a cord, and then splicing the broken rope. This done, he extracted from the waistband of his trousers what appeared to be a handful of dried peas—probably counted down to the last grain that would support life—ate his meal, and set out to recover his cumbersome charge. But the buffalo was otherwise minded.

For thirty-five minutes the patient Chinaman vainly tried to make the huge animal leave the mud-hole, himself getting plastered with slime and deeply scratched on some dead branches.

At last the relentless yanking on his nose-rope spoiled the buffalo's repose, and he followed his driver to the cart with a fine effect of being very bored. When the collar was again fitted over his neck the oversized animal swung his head fretfully and the harness promptly snapped once more. Without a change in expression the coolie started to make a new repair, and the last we saw of him was a patient figure squatting on the road, laboriously sawing off with his teeth the end of the buffalo's nose-rope.

From Siantar to Tebing Tinggi the road had passed through dense forest, the edges of the right of way choked with wild plantains, "elephant ears," and all the quick-growing plants and vines that the jungle sends out to recover the land stolen from it.

Only a few ambitious tobacco estates broke in on the ranks of the vine-entangled, straight-trunked trees; but from Tebing Tinggi the run to Medan took us through some of the most thriving estates in Sumatra. In that fertile section was represented nearly every variety of plantation found on the island.

THE RUBBER PLANTATIONS OF SUMATRA

Second in extent and in importance to the vast tobacco fields—surpassing them in many cases—were the acres devoted to rubber, both indigenous *Ficus elastica*, many branched and buttress-rooted like a

A CHINESE COOLIE MENDING THE HARNESS OF HIS BUFFALO CART

In the meantime the buffalo is taking his daily noonday bath and siesta in a near-by mud-hole.

banyan, and *Hevvea braziliensis*, enormously popular in Malaya.

Liberian coffee thrived in the shade of the *hevvea* or under the protection of vast coco-palm groves; ten-foot pepper vines climbed thickly up the trunks of small trees, clumps of tall areca palms waved their graceful fronds high in the air, and dense forests of teakwood, planted in even rows, overhung and shaded the road.

Other things without end grew in like profusion, and all helped prove what the planter enthusiasts had told of the island's future. With rich alluvial soil, unfailing rainfall, and tremendous natural resources, only the lack of labor and the deterrent influence of warring tribes has held Sumatra practically at a standstill while its sister island, Java, has flourished so greatly.

Sumatra's exploitation has been carried on very slowly and cautiously, it is true, but without the aid of the severe though wonderfully beneficial methods of the Java culture system; and before the close of many years its economic development and wealth will astonish even those familiar with the statistics of Java.

We reached Medan early in the afternoon, and the next morning ran down ten miles to the end of the road and took the Deli railway for two or three miles to the port of Belawan, in the mangrove swamps.

A wearying two-hour struggle ensued in the moist, oppressive heat of the low coast—a contest against heavy odds in the shape of booms that were too short, planks that were too weak, spaces too narrow, and stanchions that interfered, and all the other things that make a nightmare of loading and unloading motor cars on ships unprepared to handle them.

But we won in the end, with the help of a placid Dutch officer, who showed no anxiety over the disruption I was causing the company's sailing schedule; and when the car was at last on board, the *Rumphius* dropped down the river to the Straits, swung southeast for Singapore, and shortly sunk the low east coast of Sumatra in the haze of late afternoon.

All the music you delight to hear

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So fascinating is this book that we doubt if you could glance into its 530 pages without becoming absorbed in it. Whether you own a Victrola or not, this is the kind of book you will find yourself browsing through just for the pleasure it gives you. And if you *are* a music-lover, this Victor Record Catalog will increase your knowledge and appreciation of good music many fold.

It contains portraits of Victor artists with biographical sketches and has a complete Red Seal section devoted to the greatest artists of all the world who make Victor Records.

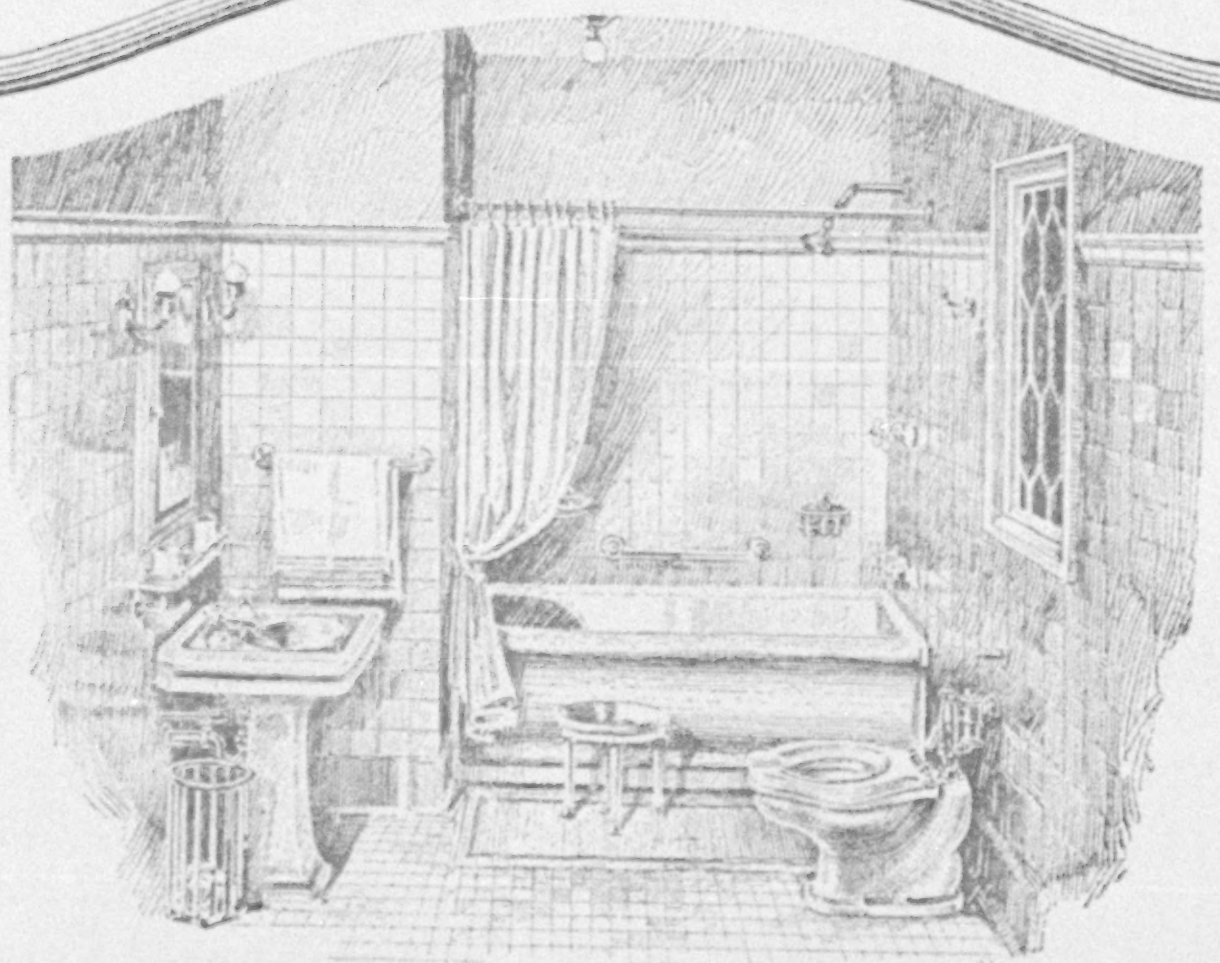
There are also portraits and short biographies of the great composers, and a pronunciation table of the names of artists, composers and operas.

In addition to this, the Victor Record Catalog gives brief stories of the opera, shows illustrations of various scenes, indicates under the title of each opera the different acts and scenes, and lists all the selections in the exact order they are sung or played in the opera.

Free at any Victor dealer's

Be sure to get a copy of this interesting book – the greatest catalog of music in all the world. There is a copy for you at any Victor dealer's, or we will mail you a copy upon request.

Victor Talking Machine Co., Camden, N. J.



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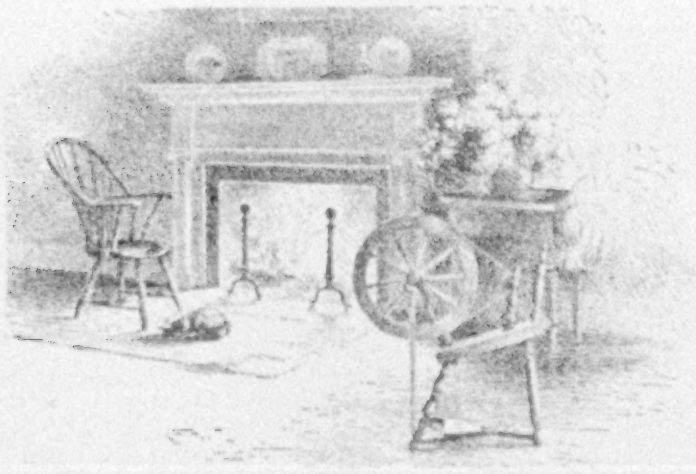

Old-fashioned Thrift

IT is never out of date. A family that saves brings contentment to its fireside. And the oftener you invest in sound securities, the easier it becomes to save.

You want every dollar you invest to yield you and yours a substantial return. For there is something almost sacred about your savings.

We know how you feel and we realize our responsibility when we encourage thousands of investors all over the country to come to us for securities.

Before we buy and distribute a new issue of securities, we make a thorough investigation of the past history, management, product, integrity, and financing back of it. We offer only the securities of Governments, Cities, and of Corporations with established records of earnings.

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The Miracle on Your Table

THE days of "miracles" have never passed. Never was the world so filled with miracles as it is today—the miracle of the faucet which brings us water from miles away—the miracle of the gas flame by which we cook without the discomforts of old-time methods—the miracle of the telephone.

Consider, for a moment, the amazing miracle of *canned foods*.

The well-known can of corn or peas or tomatoes on your pantry shelf fairly bristles with romance—what a thrilling story it could tell!

That can of corn, let us say, represents a cross-section of some State famous for the surpassing quality of its corn crop.

This can of pineapple is reminiscent of soft and balmy atmosphere and sunny skies.

Only a little while ago these salmon, which are such a delight to appetite, were in their native element, leaping the falls of a northern river.

Here is asparagus—fruit—beans—peas—corn—tomatoes, etc., each from that part of country where climatic conditions, or conditions of the soil, produce the finest varieties, and consequently have caused canneries to be there established.

And so it goes. The canning industry covers the map of the United States, drawing upon practically every region of the country for its product.

Fresh from its native habitat the product enters the canning factory.

Take canned vegetables. The canning com-

© 1920—National Canners Association

panies make annual contracts with farmers for their yearly yield of marketable vegetables grown close to the canneries. The contracts frequently are signed long before the seed is put in the ground.

As soon as the seed is planted the canners send out representatives, known as field-men. Each field-man watches the progress of the crop within a given area, and offers personal advice to each farmer in his territory as to when it should be harvested.

Once in the cannery the product is handled almost wholly by machinery—ingenious machinery which works far faster and more efficiently than human hands—and never gets tired. The work is watched at each stage of its progress. Finally the canned food is sent out to perform its useful mission in the world of men.

The next time you visit the grocer, glance with new interest at the canned foods standing in prim precision on his shelves. They have come from many different regions—yet at last they meet on common ground, the grocer's shelf and then your table.

A staff of scientists in the laboratories of the National Canners Association, Washington, D. C., labors incessantly on the scientific preservation of canned food through perfect sterilization. New problems making for perfection are continually being solved. The achievement of the present container also can be largely credited to the labor of these scientists. Data is exchanged with other scientists everywhere. The latest findings are communicated to thousands of canneries, and "The Miracle on your Table"—delicious, nourishing food, from every part of the country—becomes, thanks to science, an accomplished fact.

Thank France for the offer by her Government, some one hundred and twenty-five years ago, of 12,000 francs as a prize for a method of preserving foods for use by her army and navy. Nicholas Appert won the prize after fifteen years' experiment (the wars of the great Napoleon constantly emphasizing the need for success), and thus laid the foundation of today's mighty industry. Commercial canning started in America one hundred years ago and was immensely accelerated by the Civil War. Now it is a $200,000,000 industry. The United States produces and consumes more canned food than any other country in the world.

Not long ago canned foods were regarded as delicacies, far beyond the reach of every-day pocket-books.

The vast development of the canning industry has changed all this. The humblest family now revels in Columbia River or Alaskan salmon and blithely orders beans that were grown and packed a dozen States away. The whole country is a great recruiting ground for canned foods.

Washington, D. C., is the headquarters of the National Canners Association, whose research laboratories are there located.

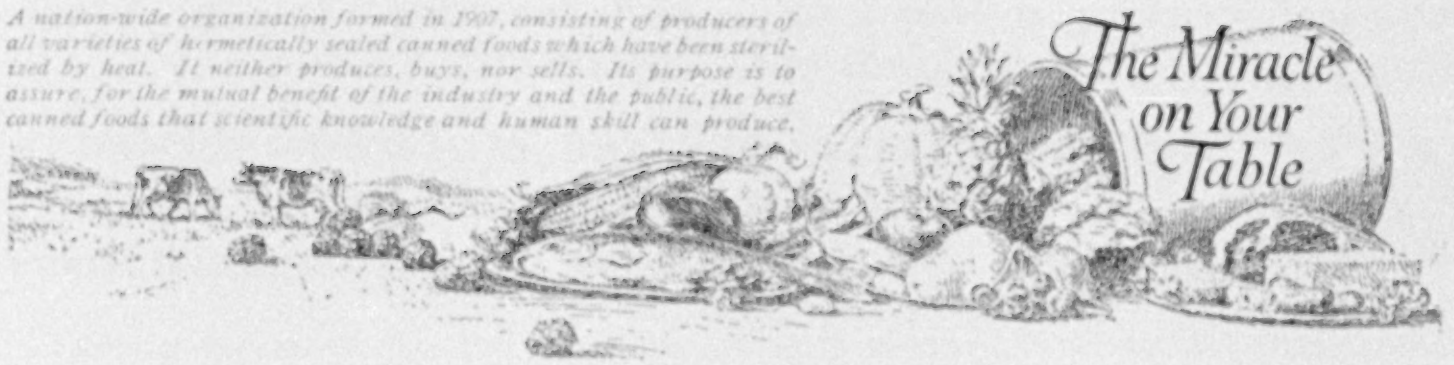
Questions of great moment to the canning industry are there threshed out. Dr. W. D. Bigelow, assisted by a group of scientists, investigates problems bearing on the scientific aspects of the canning industry.

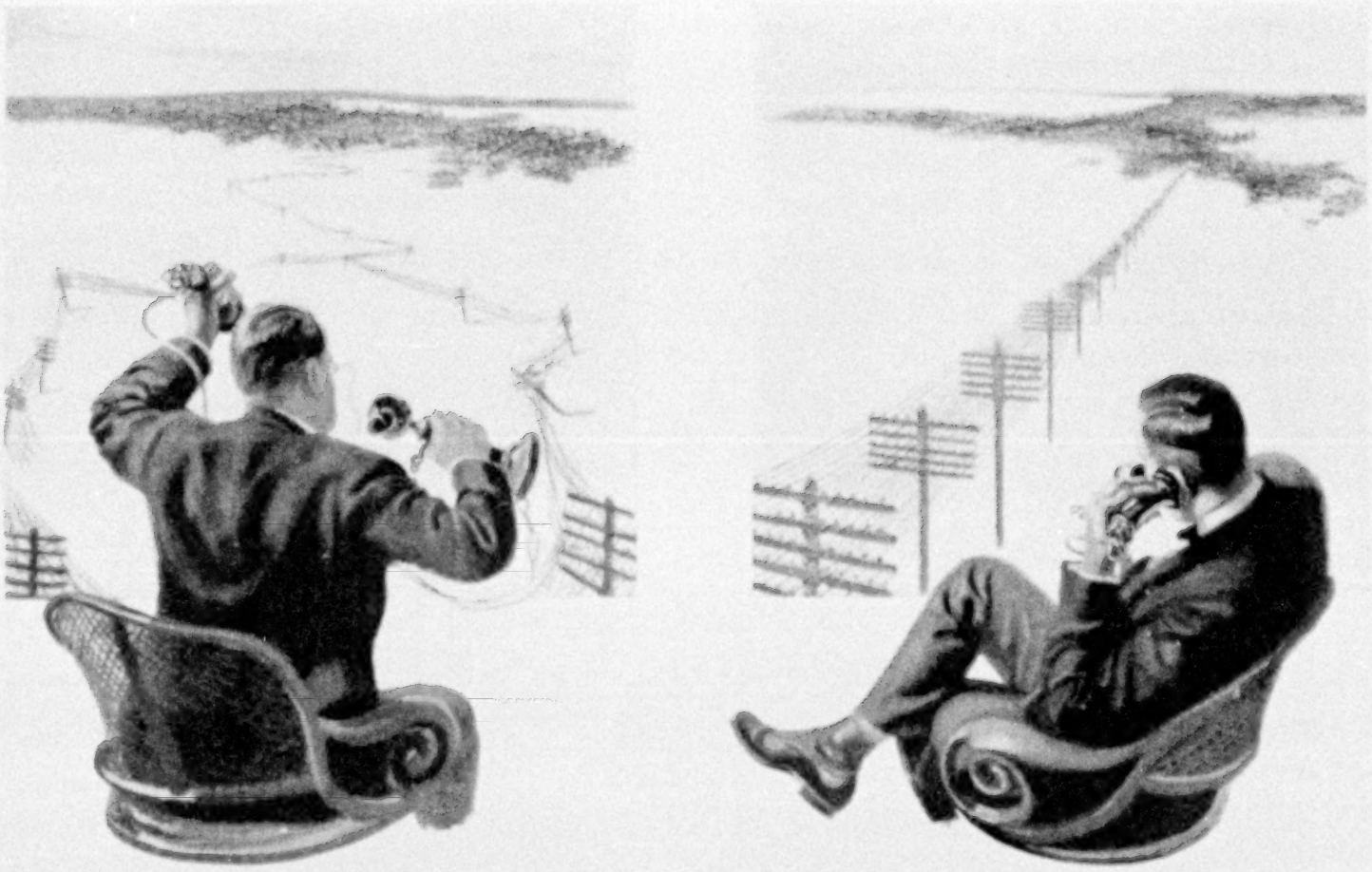
The results of these investigations are made known to members of the Association—about 1140 of the principal canning establishments of the country, many with research laboratories of their own.

The work of the Association is of the utmost importance to every housewife in the land. Bear this in mind the next time you call your grocer on that modern miracle, the telephone, and ask him to include in your next order that other modern miracle, a can of vegetables, fruit, milk, soup, meat, or fish, as the case may be.

THE NATIONAL CANNERS ASSOCIATION
WASHINGTON, D. C.

A nation-wide organization formed in 1907, consisting of producers of all varieties of hermetically sealed canned foods which have been sterilized by heat. It neither produces, buys, nor sells. Its purpose is to assure, for the mutual benefit of the industry and the public, the best canned foods that scientific knowledge and human skill can produce.





Where Upkeep Counts Most

Twelve million miles of wire, connecting cities, villages, farms; running under busy streets and across trackless prairies; these are the Bell Telephone's avenues of speech.

These twelve million miles of wire, throughout every foot of their length, must be kept electrically capable.

A few drops of water within a cable may cut off a thousand subscribers. A line snapped by storm may isolate a district. A wet leaf touching a wire may stop service. In most kinds of work the lessening of efficiency means merely the lessening of service; but with the telephone, mechanical and electrical conditions must be practically perfect to insure operation.

The most delicate electrical currents in use are those of the telephone, and inspection must be ceaseless that the lines may be kept in constant readiness.

These conditions and costs must be met to provide this high standard of service needed and demanded by the American people.

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If you ask at the store for a Kodak camera, or Kodak film, or other Kodak goods and are handed something not of our manufacture you are not getting what you specified, which is obviously unfair both to you and to us.

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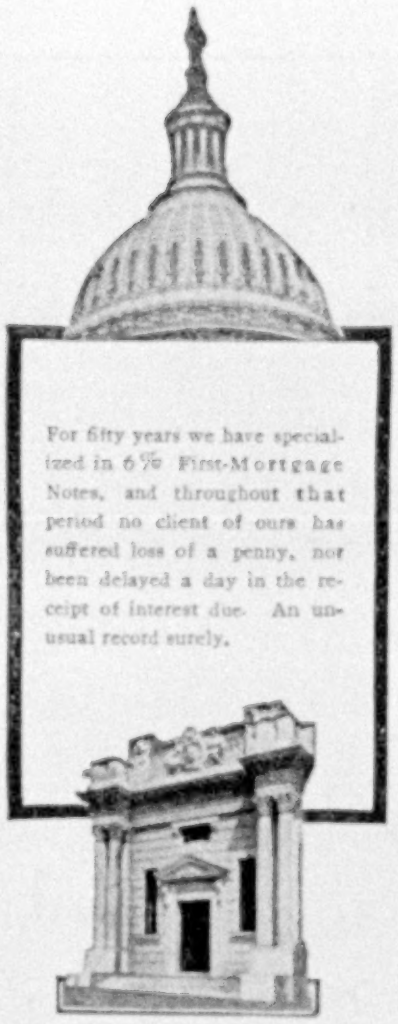

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Dental Facts

Which Everyone Should Know

All Statements Approved by High Dental Authorities

Film is What Ruins Teeth

The cause of most tooth troubles is a slimy film. It is ever-present, ever-forming. You can feel it with your tongue.

That is what discolors—not the teeth. It is the basis of tartar. It holds food substance which ferments and forms acid. It holds the acid in contact with the teeth to cause decay.

Millions of germs breed in it. They, with tartar, are the chief cause of pyorrhea.

Brushing Doesn't End It

That film is clinging. It enters crevices and stays. Ordinary brushing methods leave much of it intact. Month after month the film remains and may do a ceaseless damage.

That is why so many brushed teeth discolor and decay.

Dentists long have realized that ordinary cleaning methods were inadequate. They have sought a film combatant. Now, after years of research, science has supplied it.

Able authorities have amply proved its efficiency. Leading dentists everywhere are urging its adoption. And now, millions of teeth are daily cleaned in this effective way.

A Trial Tube to Everyone

For home use this method is embodied in a dentifrice called Pepsodent. And, to show its results, a trial tube is sent to all who ask.

Pepsodent is based on pepsin, the digestant of albumin. The film is albuminous matter. The object of Pepsodent is to dissolve it, then to day by day combat it.

But this logical method long seemed impossible. Pepsin must be activated, and the usual agent is an acid harmful to the teeth. Now science has discovered a harmless activating method. And now active pepsin can be constantly applied.

The results are quickly told by a test. We urge you to make it, and the book we send will tell the reason for them.

See the Effects in Ten Days

Send the coupon for a 10-Day Tube. Then note how clean the teeth feel after using. Mark the absence of the slimy film. See how teeth whiten as the fixed film disappears.

Compare the results with your old methods. Then let your own teeth decide the method best for you and yours. Cut out the coupon now.

Pepsodent PAT. OFF. REG. U. S.

The New-Day Dentifrice

A scientific tooth paste which leading dentists all over America now urge for daily use

289

Ten-Day Tube Free

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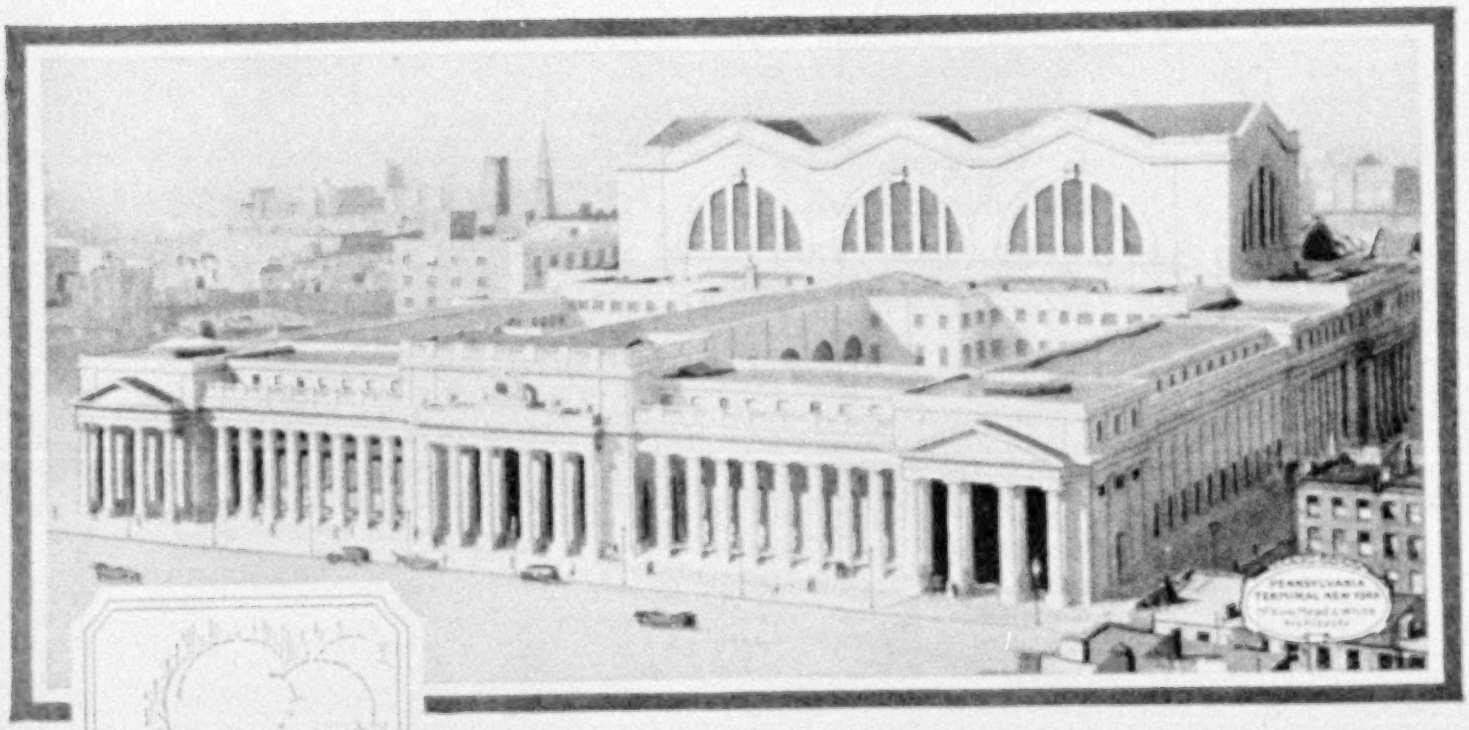
Name .....

Address .....



"Fuller-Built" Landmarks

THE building of a terminal such as the Pennsylvania Station, in the heart of New York City, called for experience in building construction and engineering service embracing practically every known phase of building work, and ability to solve many new problems that had never presented themselves before in a building operation.

Working in close harmony with the architect and engineers of the Pennsylvania Railroad, these problems were met and handled by the George A. Fuller Company in a way that is typical of the character of service that is available to any architect, engineer or owner.

Other notable Fuller-Built Terminals are:

Kansas City Terminal, Kansas City, — Jarvis Hunt, Architect, Chicago.
Chicago & Northw'n Railway Terminal, Chicago, — Frost & Granger, Architects, Chicago.
Michigan Central Terminal, Detroit, — N.Y. Central Railroad Co., Architects, Geo. H. Webb, Chief Engineer.
Wabash Depot, Pittsburgh, — Theodore C. Link, Architect, St. Louis.
Hudson Terminal, Hudson Tubes, New York, — Clinton & Russell, Architects.
New Pennsylvania R. R. Freight Terminal, Chicago, — Price & McLanahan, Architects.
Canadian Pacific Terminal, Montreal, — Frank L. Ellingwood, Chief Engineer.

Whether your contemplated building operation is usual or unusual, there is experience here that will aid you to solve it most effectively and economically.

Consultations invited through any of our offices.

George A. Fuller Company

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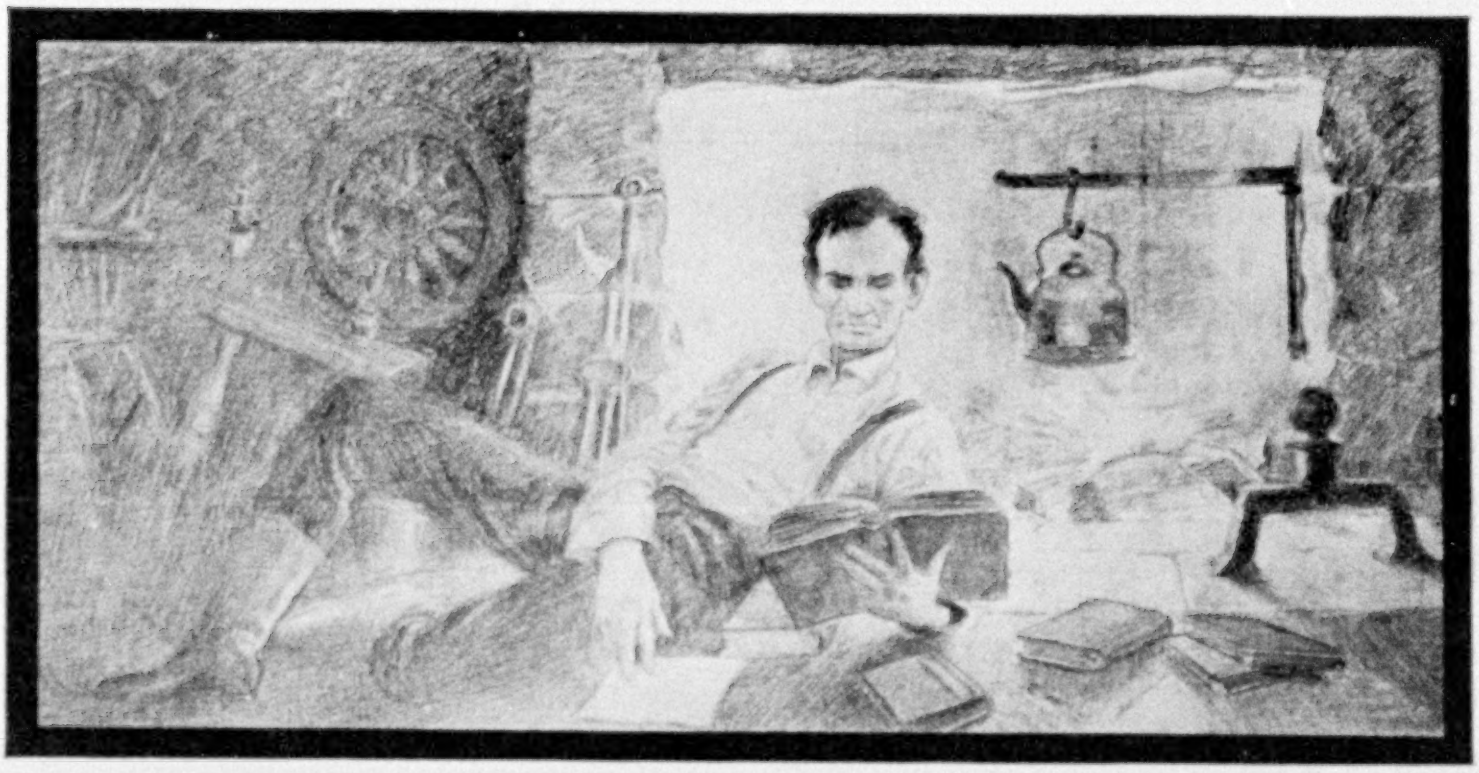

A few great books started Lincoln

Among so many books what are the few that will give the essentials of a liberal education?

He talked like a man who had traveled. He knew history; and something of Science. He wrote in a style of wonderful beauty and simplicity—such a style as only comes to a man from reading the works of master writers.

Yet, did you ever think of this?

You, yourself, have probably read as many books as Lincoln read in the first thirty years of his life.

Why is it that you have gained only a smattering of knowledge from your books while he gained a liberal education from his?

The answer is that he knew what few books were really worth while; he made every moment count.

Why not decide right now—today—that you will stop wasting your reading? Why not say to yourself: "In my own small way I am going to do what Lincoln did. I will read in such a way that six months from now, I will be a bigger, more effective, more interesting man or woman than I am today."

You can do it—two hundred thousand Americans have proved that you can do it—through

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FROM all the millions of books on Travel, History, Science, Biography, Essays, Drama and Poetry, Dr. Charles W. Eliot, for forty years President of Harvard, has selected four hundred and eighteen and arranged them in fifty volumes.

These books, he says, if a man or woman will give them only fifteen minutes a day, will give him the essentials of a liberal education.

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It tells what the books are that Dr. Eliot has selected, and how the reading courses and the marvelous encyclopedic index are arranged. Send for this guide-book to good reading. Send for it now: and begin at once as Lincoln did to make your reading count.

One reader says of this free book: "It opened the door to a whole new world of pleasure and growth for me." Your copy is ready; send for it now.

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Will you make out both bills on the enclosed warrant blank. Please fill it out on the face of warrant and then sign on the back in the space marked x x before a Notary Public and return the same to me.

Very truly yours,
Mrs. Thos. B. Beeman
County Librarian.

Address: Imperial County Free Library, Mrs. Thos. B. Beeman, County Librarian, El Centro, Cal.

Above is an illustration of the many cordial letters and orders pouring into the National Geographic Society Headquarters in Washington. They refer to

THE NATIONAL GEOGRAPHIC SOCIETY

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One each of all four sets	2.75

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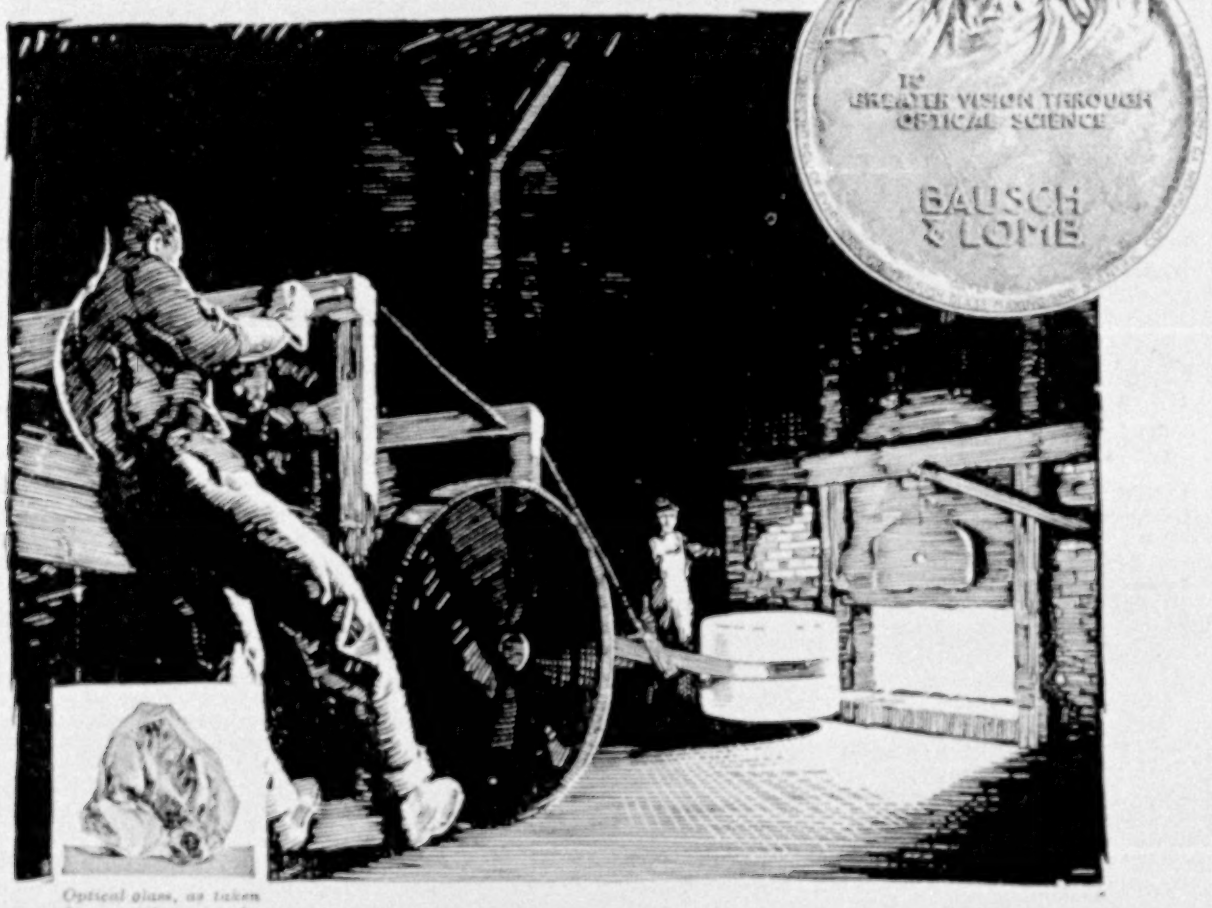

Optical glass, as taken from crucible, ready for shaping and grinding.

The End of a Foreign Monopoly

Optical glass assumed, over night, a new and terrible importance, when the world went to war with Germany. For the world, so far as it knew, was largely dependent on Germany for the higher grades, dependent on an *enemy* for the very eyes of fleets and armies—periscopes, aeroplane camera-lenses, searchlights, field glasses, range-finders. And optical glass cannot be made over night.

But it so happened that a favorite dream of our founders was of emancipation from foreign control of raw material; and for some years we had been quietly experimenting. When war came, we were ready—and ready not merely with methods and formulæ, but with a modern and complete glass plant—the first in America for making optical glass on a commercial scale.

Events have shown its immeasurable value in wartime. And it will prove no less a factor in the arts of peace.

For with our own optical glass to work with, developing various types as required, we can carry forward faster and more surely those refinements of lens and instrument making which to science mean knowledge, and to humanity a richer, safer life.

Write for literature on any optical product in which you are interested.

BAUSCH & LOMB OPTICAL COMPANY . . . ROCHESTER, N. Y.

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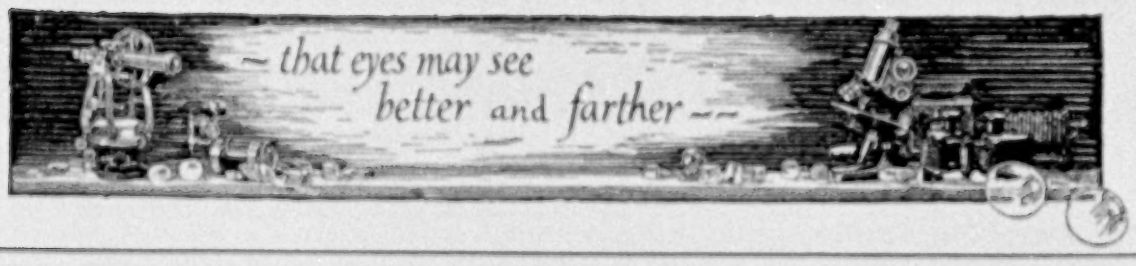

Purity Cross
CHOP SUEY

Odd delicacies of the Orient — Chinese water chestnuts, Chinese bean sprouts, bamboo shoots and other rich ingredients all combined by our master chef — *that* is inimitable Purity Cross Chop Suey!

Try it for supper

ALSO—PURITY CROSS Chicken a la King, Creamed Spaghetti au Gratin, Creamed Finnan Haddie, Lobster Newburg, and Welsh Rarebit. All in 2 size tins—ready for your instant use—at good stores. Also Meat Delicacies in tins.

SPECIAL—Get-Acquainted Assortment Offer

If your dealer hasn't Purity Cross Delicacies—send us his name and $2.00—and receive an assortment—one each of the above six—prepaid.

Send best dealer's name and get the Purity Cross Suggestion Book—"The Daily Menu-Maker."

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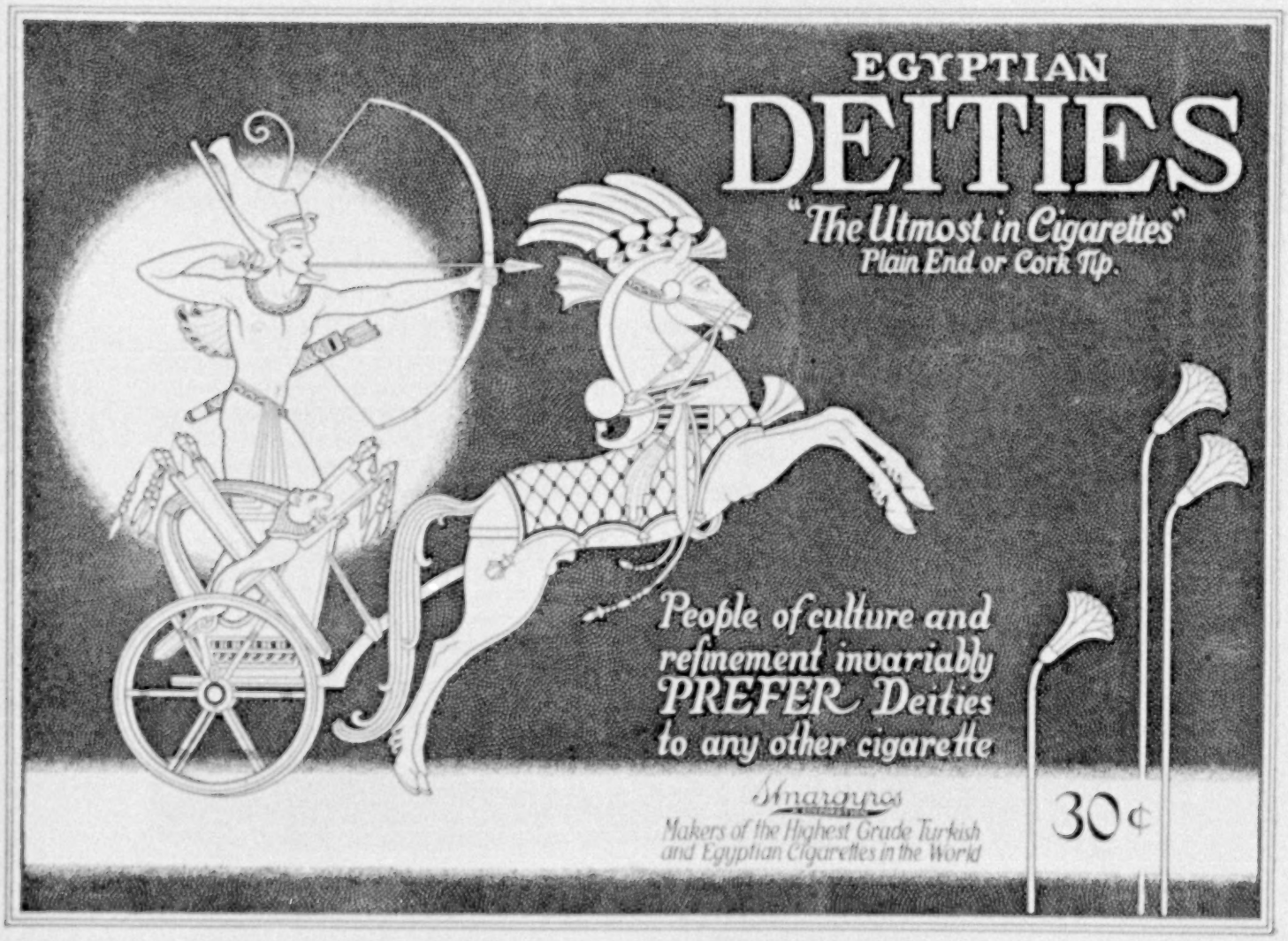

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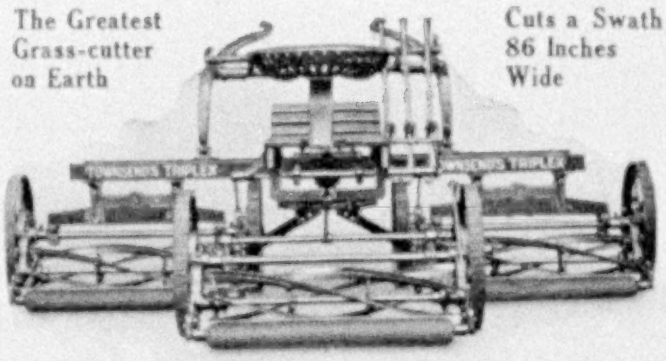

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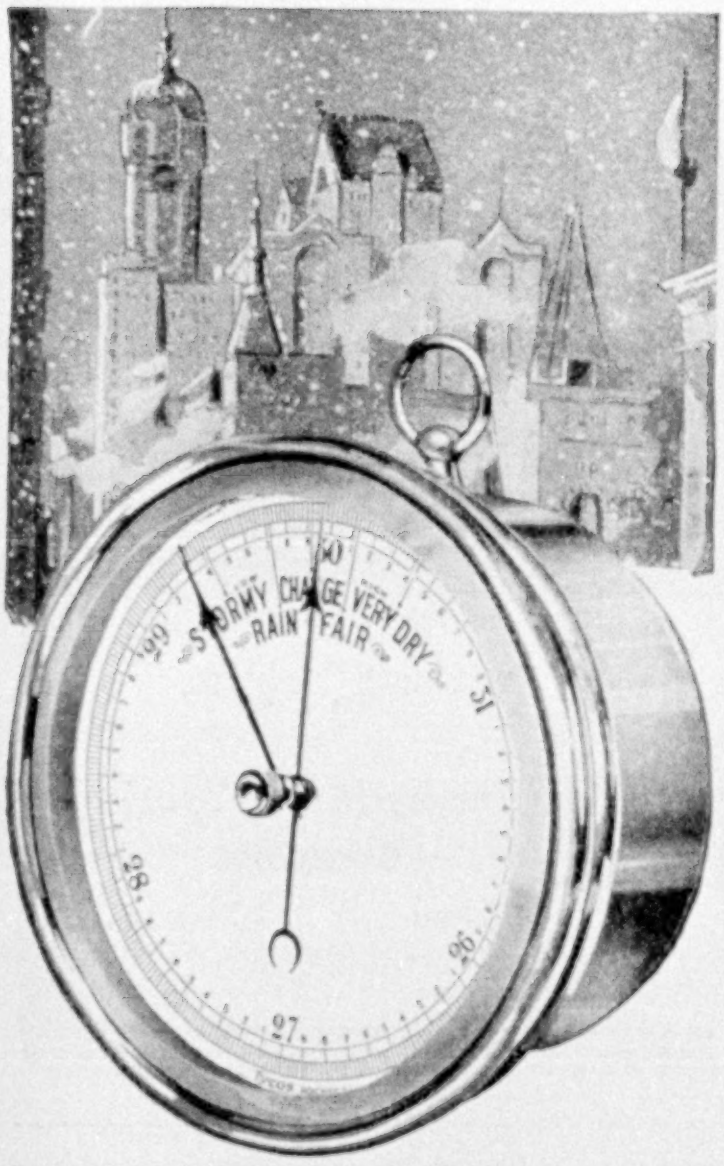

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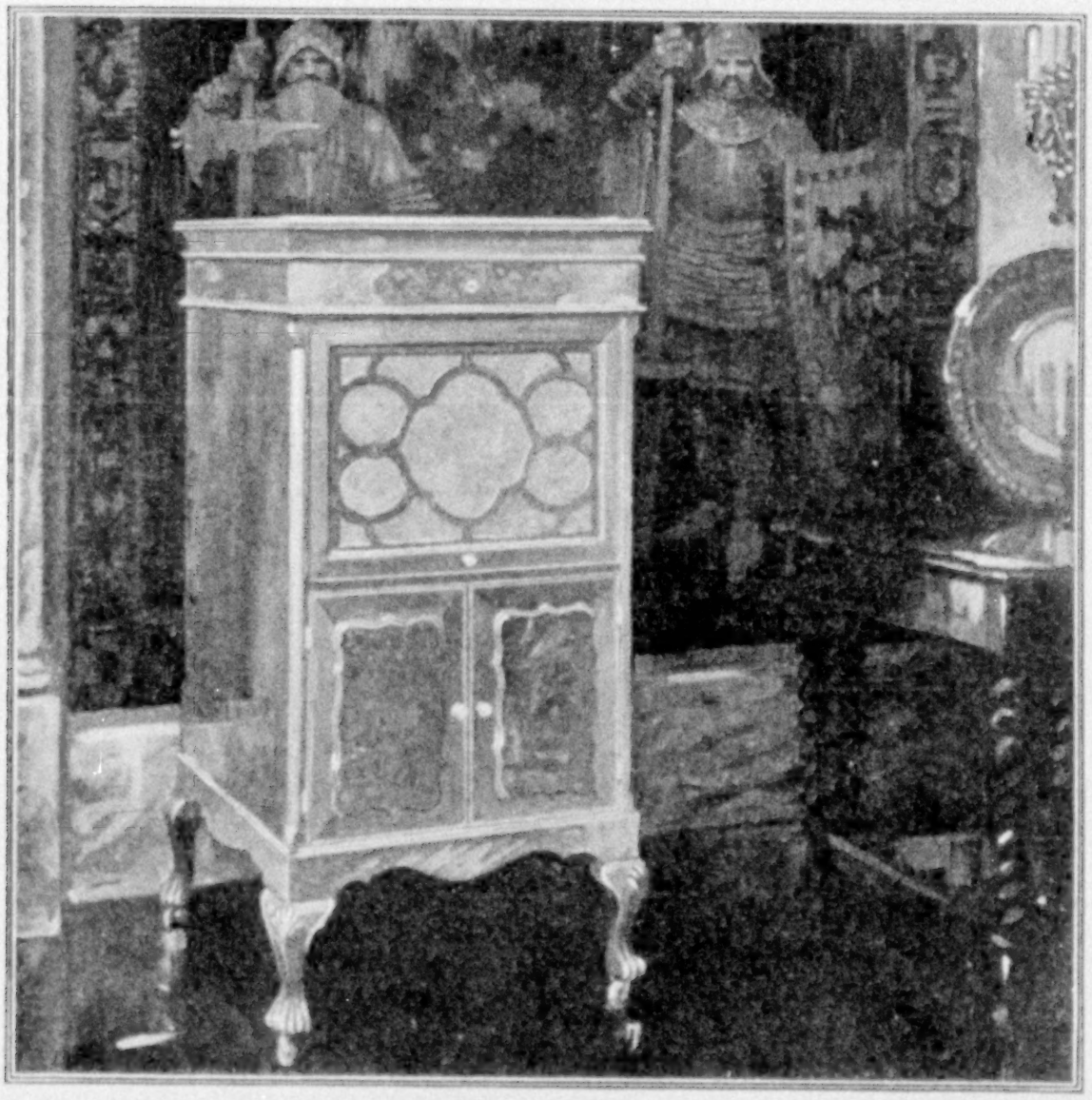

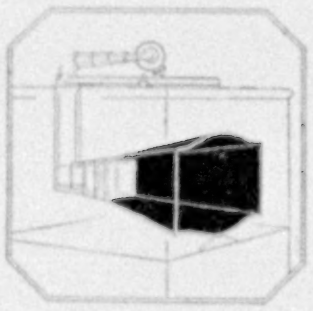

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